

**WARM SPRINGS VALLEY  
GROUND WATER USE INVENTORY  
WATER YEAR 1999**

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Nevada Division of Water Resources  
Office of the State Engineer

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## **PURPOSE AND SCOPE**

This document is intended to quantify groundwater use in Warm Springs Valley and inventory ground water resources allocated by the Nevada Division of Water Resources (Office of the State Engineer) for that period beginning October 1, 1998 and ending September 30, 1999 (hereinafter referred to as the 1999 water year).

Warm Springs Valley (AKA: Palomino Valley) lies north and east of the Reno-Sparks area approximately 12 miles along S.R. 445 (Pyramid Lake Highway) encompassing an area of about 250 square miles. Very little dependable surface water exists at the valley floor so underground sources provide the majority of the water placed to beneficial use. Warm Springs Creek from the north and Cottonwood Creek from the south drain into the valley from the surrounding mountains and are fully appropriated before they reach the valley floor. Mullen Creek intercepts drainage that overflows from Warm Springs Valley and conveys it to Pyramid Lake Valley on the northeast. Warm Springs and Cottonwood Creeks are perennial near the mountains but only reach the valley floor during periods of heavy runoff and, on rare occasion, overflow into Mullen Creek an ephemeral stream. Several additional small named streams exist within the limits of Warm Springs Valley but none reach the valley floor on a regular basis.

## **SUB AREAS**

The sub areas herein do not represent drainage sub basins as defined by the State Engineer. The boundaries of the sub areas were determined by the intensity of water use and physical features. The sub areas are: West (W), Central (C) and South (S) (see map).

## **PROCEDURES AND SUMMARY**

The 1999 crop and water use inventory was conducted

primarily during September and October of 1999. All permitted and certificated water rights were also field checked at least once during the growing season to verify culture and estimate of water use. Those areas under irrigation from multiple rights from the same well will have the total use pro-rated over the entire area under irrigation regardless of culture. This means that the water pumped is divided up amongst the valid permits and uniformly "spread out" over the place of use actually irrigated. This becomes complex when temporary rights enter the picture. In any event, the total water pumped will be as accurate as the meter readings allow.

Total use from all sources, including domestic wells, was estimated as **5140** acre-feet (see pg. 3). The increase from the 1998 pumping volume reflected a more normal water application rate with typical seasonal temperatures. The instances of pumping in excess of the allowed duty increased by an order of magnitude in this water year, however total water diverted was still well below the total committed (permitted) duty. In the two most flagrant over-use instances, a failed meter and a misunderstanding of the permitting process (movement of existing rights) were involved.

Irrigation continues to represent the primary consumption of water with alfalfa, onion, garlic and turf as the major crops. An estimated **4578** acre-feet was pumped to this use. The greatest concentration of irrigated land lies east of the Pyramid Lake Highway in the central sub area on and near land formerly controlled by MCO Properties, Inc. The next largest area of irrigation is in the west sub area scattered along the Winnemucca Ranch Road north of Range Land Road and on the Winnemucca Ranch.

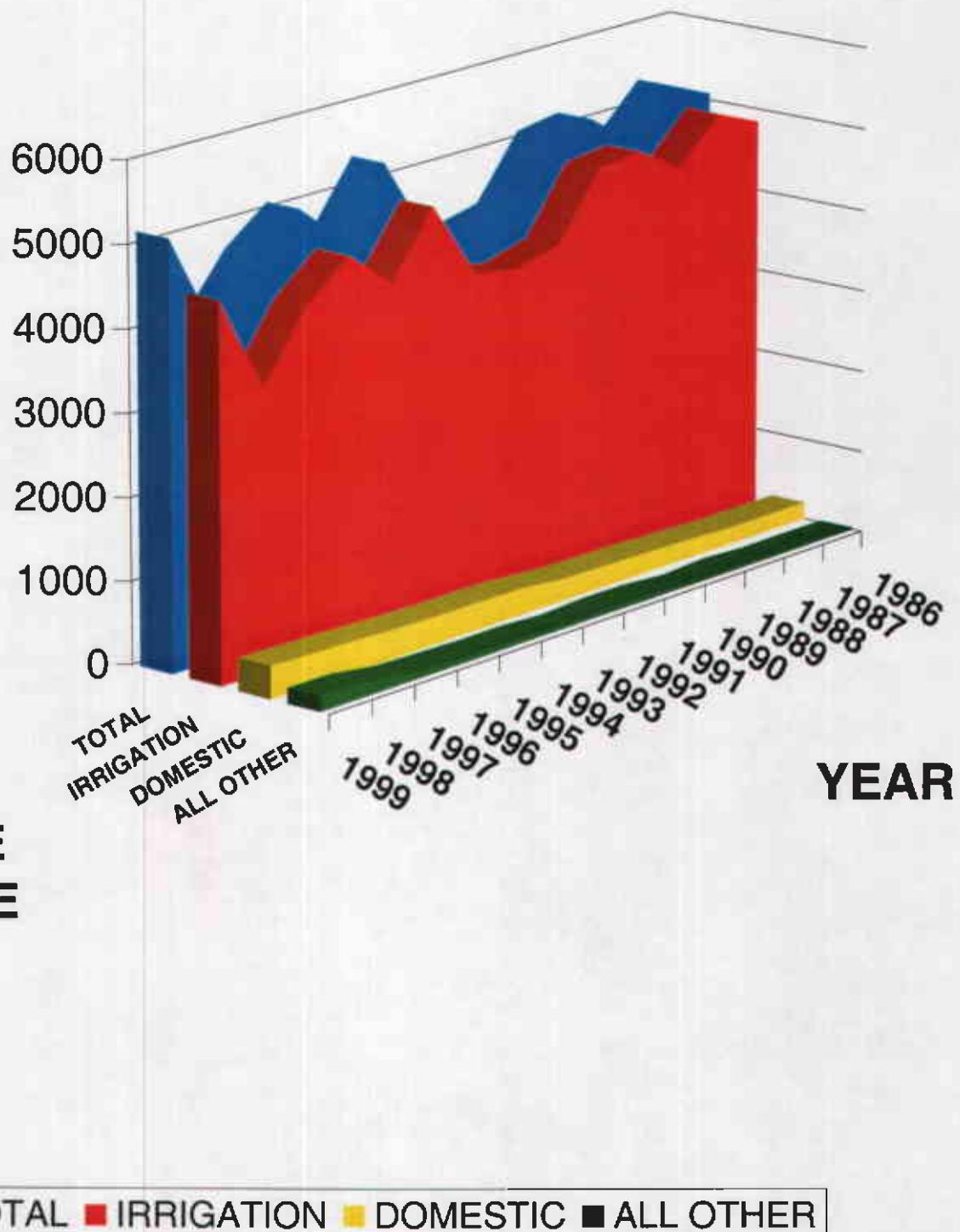
Additional irrigated land lies scattered about the valley in 0.5 to 20.0 acre fields usually accompanied by single-family dwellings.

Domestic use was estimated from a count of domestic wells drilled in the valley at **403** acre-feet. The count was cross-referenced to Washoe County Assessor's records for parcels with dwellings to increase accuracy. Since the landscaping is

## ESTIMATED TOTAL WATER USE

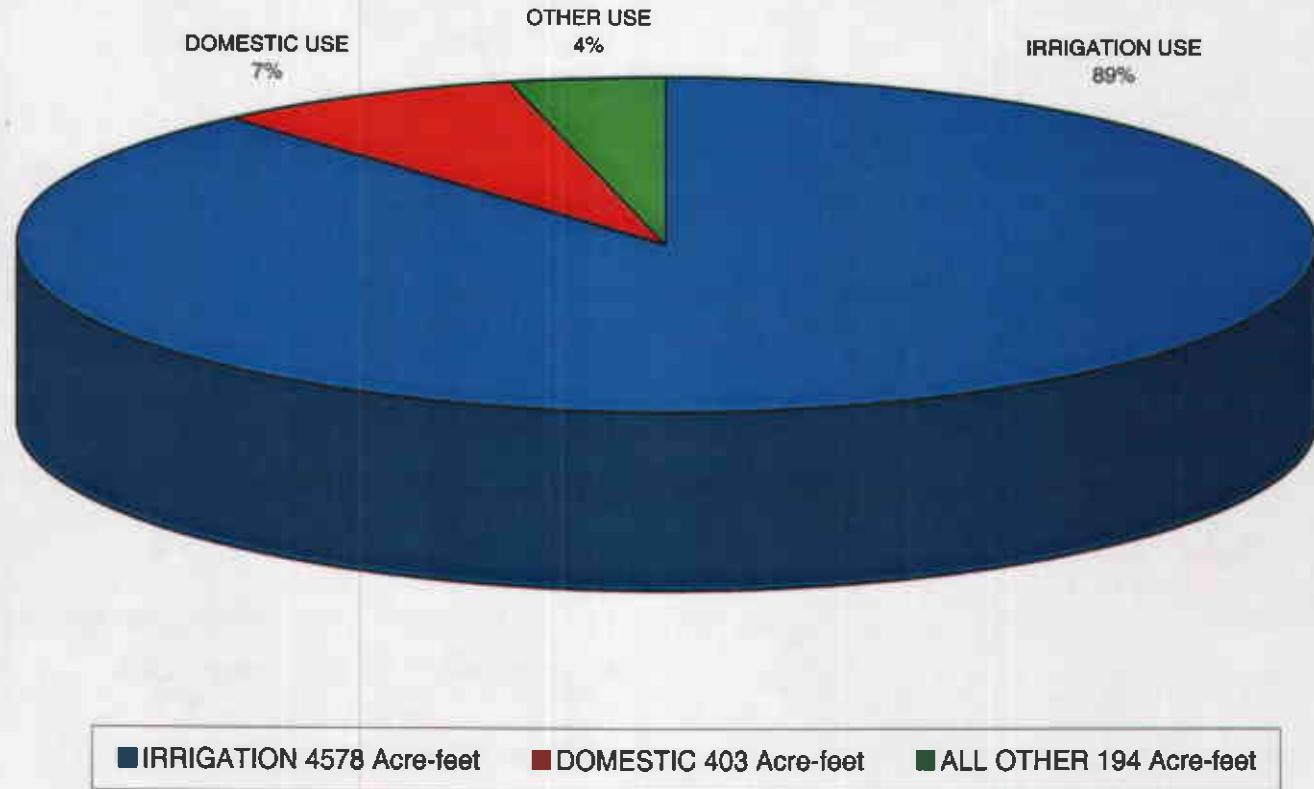
ACRE-  
FEET  
PUMPED

USE  
TYPE



## WATER PUMPED BY USE TYPE

Water Year 1999



typically minimal unless a water right (permit) is attendant, the annual duty was estimated based upon a diversion rate of 1000 gallons per day. This yields an annual duty of 1.12 acre-feet annually per well in use.

Stock watering was estimated based upon the number of animals watered at 22 acre-feet.

Recreation accounted for about 1 acre-foot at the Washoe County Regional Shooting Facility and at the Air Sailing, Inc. glider strip.

Quasi-municipal use accounted for 73 acre-feet at the Reno-Sparks Indian Colony by Hungry Valley Utility District (H.V.U.D.), the volunteer fire station (T.M.F.P.D.) and Palomino Valley General Improvement District (P.V.G.I.D.).

Industrial and other uses accounted for 97 acre-feet with the major use being environmental remediation at the old Rocketdyne sites.

## **SUPPLEMENTAL RIGHTS**

18.15 acres of the irrigated land on the Winnemucca Ranch are supplemental to Warm Springs Creek water in the amount of 64.60 acre-feet. Several underground rights are supplemental to other underground rights and are shown with a duty of "0.00" acre-feet.

## **ERRATA**

Certain lands in the central area formerly under the control of MCO Properties, Inc. have been stripped of their water rights by deed and the land sold to third parties. Over time, the third parties have consolidated their remaining water rights on the same lands. Although the land to which water is appurtenant under several portions of permits owned by second parties is irrigated, their water rights have not been exercised since January 15, 1992. The specific remaining certificated permits referred to are as follows: 28071, 28444, 28447, 30111, 30112 and 30119.

## **RECHARGE**

The State Engineer maintains neither snow courses nor precipitation gauges in the mountains surrounding Warm Springs Valley. Stream flow measurements are also not regularly performed. Subsequently, recharge to Warm Springs Valley has been estimated by empirical methods as described in Report 43. That estimate, by the Eakin method, was placed at 6,000 acre-feet annually<sup>1</sup>.

Runoff was estimated by D. O. Moore in Report 43 as 14,000 acre-feet annually, primarily from Warm Springs Creek and

Cottonwood Creek. Mullen Creek was estimated to drain the valley in the amount of about 70 acre-feet annually. No playa exists in Warm Springs Valley which leads one to believe that actual recharge from runoff may be somewhat higher than the Eakin method would otherwise suggest, or the phreatophyte consumption is much higher than estimated.

Recharge from irrigation is not readily estimated and is dependant upon several variables: rate of water application, total depth of wetting, direct evapotranspiration rates, crop type and infiltration and percolation rates which are in turn dependant upon soil type and structure. Based upon Report 43 the rate of recharge from irrigation is likely minimal.

A water budget assumes that for a steady state condition the total input of water must equal the total draw on the water. Therefore, the actual recharge of the valley must not exceed the total draw on the groundwater of the valley in a steady state or "pre-development" condition. This assumption is the basis for any estimate of perennial yield from a given groundwater system. Using a water budget, Report 43 arrived at a perennial yield of **3000 acre-feet** annually due to the observed draws on the groundwater in Warm Springs Valley and the difficulty in capturing all of the water that is otherwise "lost" through natural evapotranspiration. This is the figure utilized by the State Engineer in water planning decisions.

A more recent series of studies have verified many of the assumptions that were made in Report 43 and confirmed that the methodology utilized was reasonably accurate<sup>2</sup>.

<sup>1</sup> Please see entry (1) in the selected bibliography.

<sup>2</sup> Please see entries (2) and (3) in the selected bibliography.

## **LEGEND**

A number of abbreviations are used in the tables of this report. The following two pages are a brief discussion of the columns of the report and definitions of abbreviations utilized.

### **APPEARING IN THE SUMMARY**

<u>COLUMN HEADING</u>	<u>DESCRIPTION</u>
APP. NO.	Application number in the records of the State Engineer. If an application is issued this number becomes the permit number. AKA: File number.
STATUS	Status of the corresponding application at the end of the water year. See: Abbreviations.
DUTY	Amount of water requested in the application or allowed by the terms of the permit. All figures are in acre-feet annually (AFA).
USE 19**	Type of beneficial use to which water is applied. Amount of water pumped under the corresponding application number. Figures are in acre-feet annually (AFA).

### **APPEARING IN THE INVENTORY**

PERMIT	See: "APP. NO." above.
STAT	See: "STATUS" above.
MOU	See: "USE" above.
PERMITTEE	Owner of record in the Office of the State Engineer. Not necessarily the actual owner of the land to which the water is appurtenant.
PLACE OF USE	Forty (40) acre subdivisions in which the water is permitted to be placed to beneficial use.
Q1 Q2 SEC T R	Abbreviation of "One quarter of one quarter of a Section in a Township and Range." AKA: Legal.
UNITS/ACRES	Number of units (head of stock, number of parcels, etc...) or area to be irrigated under the terms of the corresponding permit.
DUTY	Amount of water allowed to be pumped over the course of a year. All figures in acre-feet annually (AFA).
SUPP. ADJ.	Supplemental adjustment. The sum of this column is subtracted from the sum of the "DUTY" column to yield the actual committed resources. The permit corresponding to a figure in this column is considered to be supplemental to another permit in the amount indicated. Also used to account for the issuance of TEMPORARY permits changing (abrogating) existing permits during the water year.
UNITS USED	Actual number of units served or acres of land irrigated during

DUTY USED	the reported water year. Actual (metered or estimated) amount of water placed to beneficial use during the reported water year.
MCO PAR.#	Parcel number corresponding to the "Exhibit Map Supporting the Conveyance of Water Rights by MCO Properties, Inc." on file in the Office of the State Engineer. This column only pertains to certain areas in the Central area.
REMARKS/CULTURE	Self explanatory.

## **OTHER ABBREVIATIONS UTILIZED**

CER	Certificated.
#####	Number appearing in a "STATUS" column indicates a certificate with number #####.
PER	Permitted.
RFA	Application that is Ready For Action, i.e. protest period has expired.
APP	Application prior to expiration of the protest period.
ABR	Abrogated, i.e. changed by subsequent application.
T-ABR	Abrogated by a temporary application.
WDN	Application, permit or certificate Withdrawn by applicant, agent or successor in interest.
EXP	Expired temporary permit. If used in remarks column date on which a temporary expires.
REL	Permit or certificate Relinquished to the state.
T-PER	Temporary permit. Valid for no longer than one year from date of issue.
IRR	Irrigation use.
I&D	Irrigation and domestic use.
STK	Stock watering use.
S&D	Stock watering and domestic use.
Q-M	Quasi-municipal use.
IND	Industrial use.
ENV	Environmental remediation use.
E-PER	Permitted for environmental remediation.
C-#####	Certificate number #####.
P-#####	Permit number #####.
POD	Point of diversion.
BLM	U.S.D.I. Bureau of Land Management.
GID	General Improvement District.
AF/ac.	Acre-feet per acre.
**	Quantity unable to fit format, usually extensive.

**NUMERICAL LISTING BY  
APPLICATION NUMBER  
AND  
SUMMARY OF WATER PUMPED**

### Warm Springs Valley Underground Water Rights Summary

APP. NO.	STATUS 1999	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR					
					1994	1995	1996	1997	1998	1999
23888	8283	477.80	IRR	C	536.73	161.50	385.02	357.67	228.35	66.82
24099	7599	4.00	STK	C	4.00	4.00	4.00	4.00	4.26	2.46
27395	9317	8.01	REC	W	0.56	0.35	0.86	0.49	0.42	0.58
28071	8628	6.38	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
28076	REL	7.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
28444	10632	12.12	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
28447	8634	6.00	I&D	C	0.00	0.00	0.00	0.00	0.00	0.00
30109	REL	5.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30111	10581	40.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30112	10582	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30119	10589	14.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
32363	12348	24.00	IRR	C	13.00	23.38	11.89	11.79	12.00	9.95
34668	10495	8.00	I&D	S	1.00	3.23	4.21	4.37	2.30	3.10
34670	9862	40.00	IRR	C	17.70	22.32	20.93	6.19	14.21	24.80
35486	10034	8.00	IRR	C	8.00	8.00	8.00	8.00	8.00	8.00
35565	11087	0.16	REC	W	0.21	0.17	0.33	0.15	0.11	0.01
39166	10496	80.00	IRR	C	35.39	44.63	32.87	11.95	28.42	37.20
39167	10457	160.00	IRR	C	160.00	160.00	160.00	160.00	130.50	137.36
39593	PER	64.60	I&D	W	0.00	0.00	0.00	0.00	0.00	0.97
39849	PER	20.00	REC	W	0.48	0.73	1.04	0.56	0.22	0.51
40587	11180	80.00	IRR	C	0.00	0.00	0.00	0.00	0.00	49.80
42403	11875	0.02	Q-M	C	0.02	0.02	0.01	0.01	0.01	0.01
43005	11238	100.00	IRR	C	100.00	100.00	40.67	66.56	8.20	60.21
43006	11181	8.00	I&D	S	8.00	8.00	7.00	3.00	6.00	8.00
45095	10798	8.00	I&D	W	8.00	8.00	9.90	9.57	7.05	8.68
46199	13137	172.00	IRR	C	59.48	75.96	62.64	0.00	0.00	2.94
47562	12057	16.00	I&D	W	13.31	10.85	11.37	10.00	27.57	14.40
47599	13820	2.00	IRR	W	4.06	1.85	1.53	0.85	0.73	0.67
48819	12354	5.20	STK	W	5.00	7.84	2.85	2.35	1.42	1.42
49445	13822	12.00	IRR	W	7.97	0.00	0.00	0.00	0.00	0.01
49669	11974	235.40	IRR	W	70.00	144.30	48.50	139.35	96.67	110.30
49670	11975	300.00	IRR	W	86.00	184.70	61.82	117.38	70.35	140.56
50021	13542	29.87	STK	C	29.87	18.74	14.10	15.69	31.81	18.41
50054	13051	10.00	I&D	S	10.65	6.26	7.37	6.93	5.75	4.85
50056	13610	4.00	I&D	S	1.45	0.41	0.54	0.50	0.00	0.00
50764	15254	24.00	I&D	S	0.00	0.00	28.65	7.84	0.00	0.00
51002	13241	12.00	I&D	W	17.30	11.47	14.85	14.36	10.57	13.02
51169	PER	8.00	I&D	C	3.70	3.70	3.80	2.61	2.29	2.34
51474	PER	7.00	I&D	C	3.24	3.24	3.33	2.29	2.00	2.05
52089	PER	18.38	Q-M	W	2.52	0.70	0.00	0.00	0.00	0.00
52202	13311	16.00	IRR	S	27.13	26.16	27.52	32.86	25.60	15.13
52842	13312	4.00	I&D	S	6.78	6.54	6.88	8.21	6.40	3.78
52868	13916	52.00	I&D	S	52.00	36.15	42.65	50.95	39.60	33.98
52869	13917	28.00	I&D	S	28.00	18.93	22.96	27.43	21.32	18.30
52903	RFA		IRR	S						

\*\* NOTE: "DUTY" COLUMN IS AS OF 9-30-99. \*\*

# Warm Springs Valley Underground Water Rights Summary

APP. NO.	STATUS 1999	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR					
					1994	1995	1996	1997	1998	1999
52904	RFA		IRR	S						
53242	PER	20.00	IRR	C	6.00	5.53	6.81	6.96	3.64	5.40
53243	PER	1.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
53263	13918	20.00	I&D	S	20.00	13.52	16.40	19.59	15.23	13.08
53275	14073	4.00	I&D	S	4.00	1.38	2.91	2.48	3.27	4.11
53277	ABR	0.00	IRR	S			0.00	0.00	0.00	0.00
53278	PER	5.00	IRR	S			0.00	0.00	0.00	0.00
53279	WDN		IRR	S						
53303	12897	134.80	I&D	C	139.22	178.80	88.58	63.28	94.36	156.82
53304	12898	5.59	I&D	C	3.84	4.31	3.69	3.44	1.87	2.90
53305	12899	65.20	I&D	C	67.34	86.48	98.27	70.17	45.64	75.85
53306	12900	20.40	I&D	C	17.04	19.11	16.45	15.27	8.28	12.88
53307	12901	32.12	I&D	C	26.84	30.09	25.90	24.04	13.04	20.28
53308	12902	127.88	I&D	C	106.84	119.79	103.02	95.73	51.92	80.76
53313	PER	165.32	Q-M	W	37.23	32.56	44.22	47.66	50.99	59.43
53343	PER	16.00	I&D	S	0.00	0.00	2.40	0.56	0.44	0.46
53346	PER	4.00	IRR	W	0.00	0.95	1.79	1.91	2.28	3.29
53347	ABR	0.00	I&D	S	0.00	0.00	0.20	0.20	0.00	0.00
53674	PER	4.00	IRR	C	0.00	0.00	0.00	0.00	4.03	0.00
53676	ABR	0.00	IRR	S	0.00	0.00	0.09	0.10	0.17	0.00
53677	14074	5.20	IRR	W	1.11	1.57	1.05	0.00	0.00	0.00
53678	14075	66.80	IRR	W	14.29	20.13	13.54	0.00	0.00	0.02
53694	ABR	0.00	IRR	S		0.00	0.00	0.00	0.00	0.00
53864	PER	4.00	IRR	S		0.00	1.57	2.09	1.28	1.84
53865	15261	20.00	IRR	C	20.00	20.00	0.00	20.00	0.00	0.00
54166	PER	12.00	I&D	W	0.00	0.00	0.00	0.00	0.00	0.03
54167	PER	8.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
54169	PER	20.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54265	PER	1.00	I&D	S	0.00	0.00	0.00	0.00	0.00	0.00
54411	ABR	0.00	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
54412	ABR	0.00	IRR	S	0.00	0.00	0.08	0.09	0.18	0.00
54413	ABR	0.00	I&D	S	0.00	0.00	0.00	0.00	0.00	0.00
54463	PER	6.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54465	PER	16.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54466	PER	11.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54467	PER	4.00	IRR	C	0.00	0.00	0.00	0.00	0.00	1.50
54468	PER	16.00	IRR	C	0.00	0.00	0.00	0.00	0.00	6.00
54469	ABR	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54470	PER	16.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
54614	PER	6.00	IRR	W		0.00	0.01	0.00	0.28	1.98
54615	PER	6.00	I&D	W	0.00	0.00	0.00	0.00	0.00	1.65
54616	PER	4.00	I&D	W	0.00	0.00	0.00	0.00	0.00	1.09
54889	14080	10.00	IRR	W	10.06	4.17	4.98	6.42	6.03	8.03
55118	PER	16.00	IRR	C		0.00	0.00	0.00	0.00	0.00
55119	PER	16.00	IRR	C		0.00	0.00	0.00	0.00	0.00

\*\* NOTE: "DUTY" COLUMN IS AS OF 9-30-99. \*\*

### Warm Springs Valley Underground Water Rights Summary

APP. NO.	STATUS 1999	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR					
					1994	1995	1996	1997	1998	1999
55326	PER	8.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
55483	PER	4.00	IRR	S	0.00	0.00	0.00	1.14	0.16	1.57
55603	14068	180.00	IRR	C	190.61	122.34	180.00	0.00	187.62	232.36
55604	14069	43.36	IRR	C	50.41	29.47	43.36	0.00	45.20	55.97
55605	14070	11.72	IRR	C	12.41	7.97	11.72	0.00	12.22	15.13
55606	14071	304.68	IRR	C	322.65	207.08	304.68	241.98	317.58	393.31
55607	14072	4.24	IRR	C	4.49	2.88	4.24	0.00	4.42	5.47
55656	14987	4.00	IRR	S	2.20	2.91	2.66	3.87	2.46	5.28
55657	PER	4.00	I&D	C		0.00	0.00	0.00	3.65	0.85
55658	PER	28.00	IRR	C	0.00	0.00	0.00	0.00	25.54	5.95
55659	PER	4.00	IRR	C	0.00	0.00	0.00	0.00	3.65	0.85
56164	PER	2.50	I&D	W	0.00	0.00	0.00	0.00	0.00	0.00
56284	PER	12.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
56472	PER	4.00	IRR	S	0.39	1.38	0.00	0.00	3.27	4.11
56576	PER	4.00	IRR	S	0.00	1.26	3.19	1.67	1.38	2.89
56927	PER	5.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
56929	PER	20.00	IRR	C		0.00	0.92	0.98	0.84	0.94
56930	PER	1.20	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56931	PER	7.20	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56932	PER	12.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
56933	PER	17.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
56934	PER	3.60	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56963	PER	8.00	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
57084	14031	409.48	IRR	C	410.46	224.88	379.69	351.73	210.64	320.63
57085	14078	92.52	IRR	C	95.56	17.40	19.79	14.12	51.16	107.63
57086	14032	112.40	IRR	C	116.09	149.09	169.36	120.97	62.15	130.76
57087	14033	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
57088	14034	9.08	IRR	C	9.38	12.04	13.69	9.77	5.02	10.56
57089	14035	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
57090	14036	57.32	IRR	C	57.46	31.48	53.13	49.24	29.49	44.88
57091	14037	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
57092	14038	68.80	IRR	C	68.97	37.78	63.79	59.10	35.39	53.87
57093	14039	86.00	IRR	C	86.21	47.23	79.76	73.87	44.24	67.34
57094	14040	150.60	IRR	C	150.96	82.71	139.62	129.36	77.47	117.92
57095	14041	127.60	IRR	C	131.79	169.25	192.25	137.33	70.55	148.44
57175	PER	4.00	IRR	C		0.00	0.00	0.00	0.00	0.00
57202	PER	8.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
57444	15276	11.20	IRR	C	11.86	7.61	11.20	0.00	11.67	14.46
57445	15277	24.00	IRR	C	25.42	16.31	24.00	0.00	25.02	30.98
57446	15278	20.80	IRR	C	22.03	14.14	20.80	0.00	21.68	26.85
57447	15279	13.97	IRR	C	14.83	9.52	13.97	0.00	14.56	18.07
57448	15280	5.50	IRR	C	5.82	3.74	5.50	0.00	5.73	7.10
57526	PER	4.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
57664	PER	8.00	IRR	C	2.00	4.00	3.00	3.01	4.44	8.63
57899	E-PER	80.65	ENV	C	0.00	0.58	5.52	8.87	11.35	13.78

\*\* NOTE: "DUTY" COLUMN IS AS OF 9-30-99. \*\*

Warm Springs Valley Underground Water Rights Summary

APP. NO.	STATUS 1999	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR					
					1994	1995	1996	1997	1998	1999
57983	PER	4.00	IRR	S		0.00	0.45	0.45	0.97	0.62
58057	PER	1.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
58359	PER	5.00	IRR	S			0.00	0.00	0.00	0.00
58507	14042	8.96	IRR	C	9.25	11.88	13.49	9.64	4.95	4.95
58508	14043	52.00	IRR	C	53.71	68.97	78.34	55.97	28.75	28.75
58509	14044	2.60	IRR	C	2.69	3.45	3.93	2.80	1.44	1.44
58918	PER	4.00	IRR	S			2.00	0.00	0.00	0.00
59853	DEN		IRR	S						
59854	DEN		IRR	S						
60214	PER	0.00	Q-M	W			0.00	0.00	0.00	0.00
60384	DEN		IND	W						
60385	DEN		IND	W						
60629	PER	8.00	IRR	S		0.00	0.00	0.00	0.00	0.00
60916	E-PER	322.87	ENV	C	0.00	2.55	17.12	44.21	49.12	
60975	E-PER	16.13	ENV	S	0.18	0.48	0.77	0.65	0.66	
61923	PER	40.00	I&D	C		1.00	1.00	33.57	50.47	
62157	T-EXP	4.50	IRR	C			4.17	0.33		
62166	T-EXP	255.00	IRR	C		236.13	18.87			
62425	PER	40.00	IRR	S			141.78	60.00	89.28	
62598	PER	8.00	IRR	C			0.00	0.00	0.00	
62599	PER	8.00	IRR	C			0.00	0.00	2.25	
62600	PER	8.00	IRR	C			0.00	0.00	3.00	
62601	PER	60.00	IRR	C			0.00	50.35	75.70	
62602	PER	13.16	IRR	C			0.00	11.04	16.60	
62603	PER	0.84	IRR	C			0.00	0.70	1.06	
62604	PER	40.00	IRR	C			0.00	33.57	50.47	
62605	PER	20.00	IRR	C			0.00	16.78	25.23	
62606	PER	20.00	IRR	C			0.00	14.45	25.23	
62640	PER	2.00	IRR	C			0.00	0.00	0.00	
62641	PER	10.00	IRR	C			0.00	0.00	0.00	
62642	PER	2.00	IRR	W			1.00	1.00	1.00	
62643	PER	5.00	IRR	S			0.00	0.00	0.00	
62644	PER	10.00	IRR	S			0.00	0.00	0.00	
62771	PER	47.82	IRR	C			0.00	34.55	60.34	
62772	PER	8.08	IRR	C			0.00	5.84	10.19	
62827	PER	8.00	I&D	W			4.00	1.56	5.50	
62889	PER	80.00	IRR	C			77.59	81.93	121.24	
62890	PER	540.00	IRR	C			523.72	553.04	818.40	
62898	PER	4.00	I&D	C			0.00	0.00	0.00	
63064	PER	8.00	I&D	C			0.00	0.00	6.13	
63065	PER	11.00	I&D	C			0.00	0.00	8.43	
63070	E-PER	48.39	ENV	C			0.00	11.45	12.57	
63071	E-PER	48.39	ENV	C			0.00	20.51	19.57	
63072	PER	4.00	IRR	C			0.00	0.00	3.06	
63074	PER	6.00	IRR	C			0.00	0.00	4.60	

\*\* NOTE: "DUTY" COLUMN IS AS OF 9-30-99. \*\*

# Warm Springs Valley Underground Water Rights Summary

APP. NO.	STATUS 1999	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR					
					1994	1995	1996	1997	1998	1999
63139	PER	8.00	IRR	S			0.00	0.00	0.00	
63203	PER	192.00	IRR	C			0.00	144.94	20.67	
63221	PER	4.50	IRR	S			0.00	0.00	0.00	
63222	PER	19.00	IRR	C			0.00	0.00	14.55	
63223	PER	20.00	IRR	C			0.00	0.00	15.32	
63309	PER	4.00	IRR	W			0.00	2.24	2.04	
63455	PER	20.00	IRR	C			0.00	0.00	15.32	
63456	PER	4.00	IRR	C			0.00	0.00	3.06	
63515	PER	4.00	Q-M	S					0.30	1.83
63516	WDN		Q-M	S						
63517	PER	4.98	Q-M	S				0.37	2.27	
63518	PER	8.00	Q-M	C				10.64	9.90	
63519	PER	1.12	IRR	C				0.00	0.37	
63520	PER	3.84	IRR	C				0.00	1.26	
63708	PER	10.00	IRR	C				0.00	7.66	
63782	PER	9.50	IRR	W				0.00	0.00	
64011	PER	8.00	IRR	S				0.00	0.00	
64067	PER	6.00	COM	S				0.00	1.38	
64265	PER	8.00	IRR	C				0.00	6.13	
64266	PER	4.00	IRR	C				0.00	3.06	
64267	PER	12.00	IRR	C				0.00	9.19	
64268	PER	4.00	IRR	C				0.00	3.06	
64269	PER	8.50	IRR	C				0.00	6.51	
64270	PER	12.50	IRR	C				0.00	9.58	
64501	PER	20.00	IRR	C				0.00	6.00	
64660	APP		IRR	C						
64812	PER	8.00	IRR	S				0.00	0.00	
65072	RFA		IRR	C						
65073	RFA		IRR	C						
65095	RFA		Q-M	C						
65500	APP		IRR	W						
65570	E-APP		ENV	C						
65571	E-APP		ENV	C						
65572	E-APP		ENV	C						
65573	E-APP		ENV	C						

PERMITTED DUTY 7203.35

PERMITTED WATER PUMPED

4739.62

Note: The "Permitted Duty" shown corresponds to the amount available in the given water year.

\*\* NOTE: "DUTY" COLUMN IS AS OF 9-30-99. \*\*

**WATER PUMPED BY PERMIT**

**SUMMARY BY SUB AREA  
INCLUDING DOMESTIC USE ESTIMATE**

CENTRAL	4250 Acre-feet
SOUTH	439 Acre-feet
WEST	450 Acre-feet

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT STAT MOU PERMITTEE

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			R	ACRES	(AF)	DUTY	SUPP	UNITS	DUTY	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC				ADJ.	USED	USED	USED	USED		
23688	8283	IRR	Tehama Holdings, Inc.	NE	SE	5	22	21	1.69				1.69	0.86		
23688	8283	IRR	Tehama Holdings, Inc.	NW	SE	5	22	21	5.25				5.25	2.63		
23688	8283	IRR	Tehama Holdings, Inc.	SW	SE	5	22	21	39.40				39.40	19.70		
23688	8283	IRR	Tehama Holdings, Inc.	SE	SE	5	22	21	29.32				29.32	14.66		
23688	8283	IRR	Tehama Holdings, Inc.	NE	NE	8	22	21	20.88				20.88	10.44		
23688	8283	IRR	Tehama Holdings, Inc.	NW	NE	8	22	21	33.25				33.25	16.63		
23688	8283	IRR	Tehama Holdings, Inc.	NE	NW	8	22	21	3.85				3.85	1.93		
23688	8283	IRR							133.64	534.56			133.64	66.82		MCO well #3; Alfalfa
24099	7599	STK	U.S.D.I. - BLM	NW	NE	7	22	21	172	4.00			932	2.46		Horses
28071	8628	IRR	Reno Sparks Indian Colony	NW	SW	4	22	21	0.97				0.00	0.00	39	
28071	8628	IRR	Washoe County	SE	NW	4	22	21	0.63				0.00	0.00	57	Washoe County portion relinquished 2/5/1999.
28071	8628	IRR							1.60	6.38			0.00	0.00		MCO well #2
28076	8518	IRR	Washoe County	NW	NW	16	22	21	1.88	7.50			0.00	0.00	91	Actually 1.875 Acres; MCO Well #5; Relinquished 2/5/1999
28444	10632	IRR	Reno Sparks Indian Colony	NE	NE	5	22	21	2.00				0.00	0.00	24	
28444	10632	IRR	Reno Sparks Indian Colony	NW	NE	5	22	21	1.03				0.00	0.00	38	
28444	10632	IRR							3.03	12.12			0.00	0.00		MCO well #1
28447	8634	I&D	Reno Sparks Indian Colony	SW	SW	4	22	21	1.50	6.00			0.00	0.00	49	MCO well #2
30109	10579	IRR	Washoe County	SW	SW	32	23	21	1.25	5.00			0.00	0.00	4	MCO well #1; Relinquished 2/5/1999,
30111	10581	IRR	Miller, Marilyn B.	NW	NW	5	22	21	6.00				0.00	0.00	101	
30111	10581	IRR	Miller, Marilyn B.	NE	NE	6	22	21	4.00				0.00	0.00	101	Supplemental to 30111; Duty under 30111
30111	10581	IRR							10.00	40.00			0.00	0.00		MCO well #1
30112	10582	IRR	Miller, Marilyn B.	NW	NW	5	22	21	6.00				0.00	0.00	101	
30112	10582	IRR	Miller, Marilyn B.	NE	NE	6	22	21	4.00				0.00	0.00	101	Supplemental to 30111; Duty under 30111
30112	10582	IRR							10.00	40.00			0.00	0.00		MCO well #1
30119	10589	IRR	Reno Sparks Indian Colony	SW	SW	4	22	21	3.50	14.00			0.00	0.00	48	MCO well #2

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT STAT MOU PERMITTEE  
Q1 Q2 SEC T R ACRES (AF)

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
32263	12348	IRR	Fischer, George J. & Ethelou	SW	SE	10	22	21	6.00	24.00	6.00	9.95			Model Farm; Estimate from power readings.
34670	9862	IRR	Pepple & Stewart	NE	SW	32	23	21	10.00	40.00	7.00	24.80			Fallow and Grass hay.
35486	10034	IRR	Claypool, John G. & Susan D.	NW	SE	32	23	21	2.00	8.00	2.00	8.00			Pasture; Estimate.
39166	10496	IRR	Pepple & Stewart	NE	SW	32	23	21	15.70			11.00	29.23		
39166	10496	IRR	Pepple & Stewart	NW	SW	32	23	21	4.30			3.00	7.97		
39166	10496	IRR	Pepple & Stewart						20.00	80.00		14.00	37.20		Fallow and Grass hay.
39167	10457	IRR	Douglas, Brent N.	NE	SE	4	22	21	5.60			5.40	19.02		
39167	10457	IRR	Douglas, Brent N. & Washoe County	NW	SE	4	22	21	34.40			33.60	118.34		
39167	10457	IRR							40.00	160.00		39.00	137.36		Alfalfa
40587	11180	IRR	Newell, George W. & Lolita L.	NE	SE	16	22	21	20.00	80.00		20.00	49.80		
42403	11875	Q-M	Truckee Meadows Fire Prot. District	NE	SE	6	22	21	**		0.02	**	0.01		Fire Station
43005	11238	IRR	Wells, Clifford E. & Jacqueline C.	SE	NE	31	23	21	17.30			17.30	41.67		
43005	11238	IRR	Wells, Clifford E. & Jacqueline C.	SW	NW	32	23	21	7.70			7.70	18.54		
43005	11238	IRR							25.00	100.00		25.00	60.21		Alfalfa
46199	13137	IRR	Claypool, John G. Susan D.	NE	SE	32	23	21	19.00			0.00	0.00		
46199	13137	IRR	Claypool, John G. Susan D.	NW	SE	32	23	21	24.00			0.00	0.00		
46199	13137	IRR							43.00	172.00		0.00	2.94		Fallow; Stockwatering.
50021	13542	STK	U.S.D.I. - BLM	NW	NE	7	22	21	1500	29.87		932	18.41		
51169	PER	I&D	Hemenway, Raymond F. & Gerda T.	SW	SE	14	22	21	2.00	8.00		2.00	2.34		
51174	PER	I&D	Hemenway, Raymond F. & Gerda T.	SW	SE	14	22	21	1.75	7.00		1.75	2.05		Orchard; Same POD as 51169
53242	PER	I&D	Bonham, Harold F. & Sally M.	NW	NW	13	22	21				0.00	0.00		
53242	PER	I&D	Bonham, Harold F. & Sally M.	SW	NW	13	22	21				0.45	1.22		Pasture grass, alfalfa & orchard
53242	PER	I&D	Bonham, Harold F. & Sally M.	SE	NW	13	22	21				0.30	0.81		Pasture grass, alfalfa & orchard

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT STAT	MOU	PERMITTEE	PLACE OF USE			Q1 SEC	Q2 ACRES	R (AF)	DUTY ADJ.	SUPP USED	UNITS/ ADJ.	DUTY USED	MCO PAR #	REMARKS / CULTURE
			1	2	3									
53342	PER	I&D Bonham, Harold F. & Sally M.	NE SW	13	22	21				0.25	0.68			
53342	PER	I&D Bonham, Harold F. & Sally M.	NW SW	13	22	21				1.00	2.70			
53342	PER	I&D Bonham, Harold F. & Sally M.	SW SW	13	22	21				0.00	0.00			
53342	PER	I&D						5.00	20.00		2.00	5.40		
53303	12897	I&D Tehama Holdings, Inc.	NW NW	4	22	21	33.70	134.80		33.70	156.82			
53304	12898	I&D Tehama Holdings, Inc.	SW NE	5	22	21	1.15	5.59		1.15	2.90			
53305	12899	I&D Pratt, Tom & Lanette	NW NW	4	22	21	5.90			5.90	27.45			
53305	12899	I&D Pratt, Tom & Lanette	SW NW	4	22	21	10.40			10.40	48.39			
53305	12899	I&D						16.30	65.20		16.30	75.85		
53306	12900	I&D Tehama Holdings, Inc.	SW NE	5	22	21	5.10	20.40		5.10	12.88			
53307	12901	I&D Tehama Holdings, Inc.	NW SE	5	22	21	8.03	32.12		8.03	20.28			
53308	12902	I&D Tehama Holdings, Inc.	NW SE	5	22	21	11.97			11.97	30.24			
53308	12902	I&D Tehama Holdings, Inc.	SE SW	5	22	21	0.30			0.30	0.76			
53308	12902	I&D Tehama Holdings, Inc.	NE SW	5	22	21	15.70			15.70	39.66			
53308	12902	I&D Tehama Holdings, Inc.	SE NW	5	22	21	2.60			2.60	6.57			
53308	12902	I&D Tehama Holdings, Inc.	SW NE	5	22	21	1.40			1.40	3.54			
53308	12902	I&D						31.97	127.88		31.97	80.76		
53374	PER	IRR Maio, M. Daniel & Cheryl L.	NW SE	15	22	21	1.00	4.00		0.00	0.00			
53365	15261	I&D Meade, Lester E. & Donna M.	SE NE	31	23	21				0.00	0.00			
53365	15261	I&D Meade, Lester E. & Donna M.	SW NW	32	23	21				0.00	0.00			
53365	15261	I&D						5.00	20.00		0.00	0.00		Fallow
54169	PER	I&D Baptiste, Steven L.	NW NW	14	22	21	5.00	20.00		0.00	0.00			Meter required
54463	PER	I&D Fralick, Kathleen	NE SE	9	22	21								
54463	PER	I&D Fralick, Kathleen	SE SE	9	22	21								
54463	PER	I&D Fralick, Kathleen	NW NW	10	22	21								

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			UNITS/ ACRES (AF)	DUTY ADJ.	SUPP ADJ.	UNITS USED	DUTY MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC							

54463	PER	I&D	Fralick, Kathleen	SW	NW	15	22	21						
54463	PER	I&D	Fralick, Kathleen	SW	SW	15	22	21						
54463	PER	I&D	Fralick, Kathleen	E2	NE	16	22	21						
54463	PER	I&D	Fralick, Kathleen	E2	SE	16	22	21						
54463	PER	I&D							1.50	6.00	0.00	0.00	0.00	Meter required
54465	PER	I&D	Washoe County	NE	SE	9	22	21						
54465	PER	I&D	Washoe County	SE	SE	9	22	21						
54465	PER	I&D	Washoe County	NW	NW	10	22	21						
54465	PER	I&D	Washoe County	SW	NW	15	22	21						
54465	PER	I&D	Washoe County	SW	SW	15	22	21						
54465	PER	I&D	Washoe County	E2	NE	16	22	21						
54465	PER	I&D	Washoe County	E2	SE	16	22	21						
54465	PER	I&D							4.00	16.00	0.00	0.00	0.00	Meter required
54466	PER	I&D	Fralick, Kathleen & Washoe County	NE	SE	9	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	SE	SE	9	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	NW	NW	10	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	SW	NW	15	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	SW	SW	15	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	E2	NE	16	22	21						
54466	PER	I&D	Fralick, Kathleen & Washoe County	E2	SE	16	22	21						
54466	PER	I&D							3.00	12.00	0.00	0.00	0.00	Meter required
54467	PER	IRR	Newell, George W. & Lolita L.	NE	SE	9	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	SE	SE	9	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	NW	NW	10	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	SW	NW	15	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	SW	SW	15	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	E2	NE	16	22	21						
54467	PER	IRR	Newell, George W. & Lolita L.	E2	SE	16	22	21						
54467	PER	IRR							1.00	4.00	1.00	1.50	1.50	Garlic
54468	PER	IRR	Newell, George & Lolita & Washoe Co NE	SE	SE	9	22	21						
54468	PER	IRR	Newell, George & Lolita & Washoe Co SE	SE	SE	9	22	21						Same well as 405B7; Meter failed, submitted data.
54468	PER	IRR												Garlic

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
54468	PER	IRR	Newell, George & Lolita & Washoe Cr	NW	NW	10	22	21							Washoe County lot. is 15.0 Acre-feet
54468	PER	IRR	Newell, George & Lolita & Washoe Cr	SW	SW	15	22	21							
54468	PER	IRR	Newell, George & Lolita & Washoe Co.	SW	SW	15	22	21							
54468	PER	IRR	Newell, George & Lolita & Washoe Cr E2	NE	NE	16	22	21							
54468	PER	IRR	Newell, George & Lolita & Washoe Cr E2	SE	SE	16	22	21							
54468	PER	IRR							4.00	16.00		4.00	6.00		Same well as 40587; Meter failed, submitted data.
54469	ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54469	ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54469	ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54469	ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54469	ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54469	ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54469	ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							Changed by 62605; This area.
54469	ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							Meter required
54469	ABR	I&D							0.00	0.00		0.00	0.00		
54470	PER	I&D	Washoe County	NE	SE	9	22	21							
54470	PER	I&D	Washoe County	SE	SE	9	22	21							
54470	PER	I&D	Washoe County	NW	NW	10	22	21							
54470	PER	I&D	Washoe County	SW	NW	15	22	21							
54470	PER	I&D	Washoe County	SW	NW	15	22	21							
54470	PER	I&D	Washoe County	E2	NE	16	22	21							
54470	PER	I&D	Washoe County	E2	SE	16	22	21							
54470	PER	I&D							4.00	16.00		0.00	0.00		Meter required
55118	PER	I&D	Washoe County	S2	NW	3	22	21	1.88	7.50		0.00	0.00		Meter required
55119	PER	I&D	Washoe County	SE	NW	3	22	21	0.88	3.50		0.00	0.00		Meter required
55603	14068	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			4.00	5.45		Seed test plot
55603	14068	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			2.50	3.41		Garlic
55603	14068	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			30.00	40.89		Garlic

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES (AF)	DUTY ADJ.	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T							
55603	14068	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			30.00	40.89	Onion
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			37.00	50.42	Onion
55603	14068	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			37.00	50.42	Onion
55603	14068	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			12.00	16.35	Turf
55603	14068	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			18.00	24.53	Turf
55603	14068	IRR							45.00	180.00		170.50	232.36	MCO well #5
55604	14069	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			0.00	0.00	
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			4.00	1.31	Seed test plot
55604	14069	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			2.50	0.82	Garlic
55604	14069	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00	
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			0.00	0.00	
55604	14069	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			30.00	9.85	Garlic
55604	14069	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			30.00	9.85	Onion
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			37.00	12.15	Onion
55604	14069	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			37.00	12.15	Onion
55604	14069	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			12.00	3.94	Turf
55604	14069	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			18.00	5.91	Turf
55604	14069	IRR							11.90	43.36		170.50	55.97	MCO well #5
55605	14070	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			0.00	0.00	
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			4.00	0.35	Seed test plot
55605	14070	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			2.50	0.22	Garlic
55605	14070	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00	
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			0.00	0.00	
55605	14070	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			30.00	2.66	Garlic
55605	14070	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			30.00	2.66	Onion
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			37.00	3.28	Onion
55605	14070	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			37.00	3.28	Onion
55605	14070	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			12.00	1.06	Turf
55605	14070	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			18.00	1.60	Turf
55605	14070	IRR							2.93	11.72		170.50	15.13	MCO well #5
55606	14071	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			0.00	0.00	
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			4.00	9.23	Seed test plot

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR #	REMARKS / CULTURE
				Q1	Q2	SEC							

55606	14071	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05		2.50	5.77	Garlic
55606	14071	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35		0.00	0.00	
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39		0.00	0.00	
55606	14071	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26		30.00	69.20	Garlic
55606	14071	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24		30.00	69.20	Onion
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32		37.00	85.35	Onion
55606	14071	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20		37.00	85.35	Onion
55606	14071	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18		12.00	27.68	Turf
55606	14071	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42		18.00	41.52	Turf
55606	14071	IRR					76.17		304.68		170.50	393.31	MCO well #5
55607	14072	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42		0.00	0.00	
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74		4.00	0.13	Seed test plot
55607	14072	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05		2.50	0.08	Garlic
55607	14072	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35		0.00	0.00	
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39		0.00	0.00	
55607	14072	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26		30.00	0.96	Garlic
55607	14072	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24		30.00	0.96	Onion
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32		37.00	1.19	Onion
55607	14072	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20		37.00	1.19	Onion
55607	14072	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18		12.00	0.39	Turf
55607	14072	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42		18.00	0.58	Turf
55607	14072	IRR					11.90		47.60		43.36	170.50	MCO well #5
55657	PER	I&D	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	1.00	4.00	7.50	0.85	House & pasture; Same well as P-55659
55658	PER	IRR	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	7.00	28.00	7.50	5.95	House & pasture; Same well as P-55657
55659	PER	IRR	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	1.00	4.00	7.50	0.85	House & pasture; Same well as P-55658
56829	PER	I&D	Pruitt, Leneaux & Washoe County	SW	SW	33	23	21	5.00	20.00	2.00	0.94	Domestic and garden; Wa. Co. por. = 15 AFA
56932	PER	IRR	Stinson, George W. & Washoe County	NE	3	22	21						Washoe County Por. = 10.0 AFA
56932	PER	IRR	Stinson, George W. & Washoe County N2	SE	3	22	21						Meter required; Actually 3.125 Ac.
56932	PER	IRR					3.13		12.50		0.00	0.00	

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS	DUTY	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								

56933	PER	IRR	Stinson, George W.	NW	NW	15	22	21	4.38	17.50	0.00	0.00	0.00	No meter; Domestic only; Actually 4.375 ac.
57084	14031	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	10.23		10.23	32.04		
57084	14031	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	37.13		37.13	116.29		
57084	14031	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	12.61		12.61	39.50		
57084	14031	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.04		0.04	0.13		
57084	14031	IRR	Tehama Holdings, Inc.	NE	SE	31	23	21	0.10		0.10	0.31		
57084	14031	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	0.86		0.86	2.69		
57084	14031	IRR	Tehama Holdings, Inc.	NW	NW	32	23	21	0.46		0.46	1.44		
57084	14031	IRR	Tehama Holdings, Inc.	SW	SW	32	23	21	36.00		36.00	112.76		
57084	14031	IRR	Tehama Holdings, Inc.	SE	SW	32	23	21	4.94		4.94	15.47		
57084	14031	IRR							102.37	409.48		102.37	320.63	MCO well #1; Alfalfa
57085	14078	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	5.38		5.38	25.03		
57085	14078	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	4.08		4.08	18.99		
57085	14078	IRR	Tehama Holdings, Inc.	SE	SW	32	23	21	6.33		6.33	29.46		
57085	14078	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	7.34		7.34	34.16		
57085	14078	IRR							23.13	92.52		23.13	107.63	MCO well #2; Alfalfa
57086	14032	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	7.20		7.20	33.50		
57086	14032	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	0.36		0.36	1.68		
57086	14032	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	17.60		17.60	81.90		
57086	14032	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	2.94		2.94	13.68		
57086	14032	IRR							28.10	112.40		28.10	130.76	Supplemental to P-57087
57087	14033	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	7.20		7.20	0.00		
57087	14033	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	0.36		0.36	0.00		
57087	14033	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	17.60		17.60	0.00	Certified duty = 3.64733 AF/ac.	
57087	14033	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	2.94		2.94	0.00	MCO well #2; Alfalfa	
57087	14033	IRR							28.10	102.49		28.10	0.00	Supplemental to P-57086
57088	14034	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.39		0.39	1.81		
57088	14034	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	1.88		1.88	8.75		
57088	14034	IRR							2.27	9.08		2.27	10.56	Supplemental to 57089

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS	DUTY	MCO USED	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
57089	14035	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.39		0.39	0.00			MCO well #2; Alfalfa
57089	14035	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	1.88		1.88	0.00			Supplemental to 57088
57090	14036	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	1.94		1.94	6.08			
57090	14036	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.66		0.66	2.07			
57090	14036	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	4.62		4.62	14.47			
57090	14036	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	7.11		7.11	22.27			MCO well #1; Alfalfa
57090	14036	IRR							14.33	57.32	14.33	44.88			Supplemental to 57091
57091	14037	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	1.94		1.94	0.00			
57091	14037	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.66		0.66	0.00			
57091	14037	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	4.62		4.62	0.00			
57091	14037	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	7.11		7.11	0.00			MCO well #1; Alfalfa
57091	14037	IRR							14.33	57.32	14.33	0.00			Supplemental to & duty under 57090
57092	14038	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.19		0.19	0.60			
57092	14038	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	13.89		13.89	43.50			
57092	14038	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	3.12		3.12	9.77			
57092	14038	IRR							17.20	68.80	17.20	53.87			
57093	14039	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.12		0.12	0.38			
57093	14039	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	17.51		17.51	54.84			
57093	14039	IRR	Tehama Holdings, Inc.	NW	NE	6	22	21	3.58		3.58	11.21			
57093	14039	IRR	Tehama Holdings, Inc.	SW	SE	31	23	21	0.22		0.22	0.69			
57093	14039	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	0.07		0.07	0.22			
57093	14039	IRR							21.50	86.00	21.50	67.34			
57094	14040	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.57		0.57	1.79			
57094	14040	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	3.17		3.17	9.93			
57094	14040	IRR	Tehama Holdings, Inc.	SW	SE	31	23	21	1.06		1.06	3.32			
57094	14040	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	32.22		32.22	100.92			
57094	14040	IRR	Tehama Holdings, Inc.	NE	SE	31	23	21	0.09		0.09	0.28			
57094	14040	IRR	Tehama Holdings, Inc.	SW	SW	32	23	21	0.54		0.54	1.69			

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS	DUTY	MCQ	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
57094	14040	IRR						37.65	150.60		37.65	117.92			MCO well #1; Alfalfa
57095	14041	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	2.07			2.07	9.63		
57095	14041	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	13.61			13.61	63.33		
57095	14041	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	14.72			14.72	68.50		
57095	14041	IRR	Tehama Holdings, Inc.	SE	NE	5	22	21	1.30			1.30	6.05		
57095	14041	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	0.20			0.20	0.93		
57095	14041	IRR						31.90	127.60			31.90	148.44		MCO well #2; Alfalfa
57175	PER	I&D	Washoe County	SE	NW	3	22	21	1.00	4.00		0.00	0.00		Meter required
57202	PER	I&D	Cobb, John & Susan	SW	34	23	21								
57202	PER	I&D	Cobb, John & Susan	N2	SE	33	23	21							
57202	PER	I&D						2.00	8.00		0.00	0.00			Meter required
57444	15276	IRR	Carr, Fred M.	NW	SE	8	22	21	1.74			0.00	0.00		
57444	15276	IRR	Carr, Fred M.	NE	SE	8	22	21	35.42			4.00	0.34		Seed test plot
57444	15276	IRR	Carr, Fred M.	SE	SE	8	22	21	12.05			2.50	0.21		Garlic
57444	15276	IRR	Carr, Fred M.	NW	SW	9	22	21	40.35			0.00	0.00		
57444	15276	IRR	Carr, Fred M.	NE	SW	9	22	21	40.39			0.00	0.00		
57444	15276	IRR	Carr, Fred M.	SW	SW	9	22	21	40.26			30.00	2.54		
57444	15276	IRR	Carr, Fred M.	SE	SW	9	22	21	40.24			30.00	2.54		Onion
57444	15276	IRR	Carr, Fred M.	NW	SE	9	22	21	40.32			37.00	3.14		Onion
57444	15276	IRR	Carr, Fred M.	SW	SE	9	22	21	40.20			37.00	3.14		Onion
57444	15276	IRR	Carr, Fred M.	NW	NW	16	22	21	40.18			12.00	1.02		Turf
57444	15276	IRR	Carr, Fred M.	NE	NW	16	22	21	27.42			18.00	1.53		Turf
57444	15276	IRR						2.80	11.20			17.00	14.46		MCO well #5
57445	15277	I&D	Carr, Mark C. & Wilma F.	NW	SE	8	22	21	1.74			0.00	0.00		
57445	15277	I&D	Carr, Mark C. & Wilma F.	NE	SE	8	22	21	35.42			4.00	0.73		Seed test plot
57445	15277	I&D	Carr, Mark C. & Wilma F.	SE	SE	8	22	21	12.05			2.50	0.45		Garlic
57445	15277	I&D	Carr, Mark C. & Wilma F.	NW	SW	9	22	21	40.35			0.00	0.00		
57445	15277	I&D	Carr, Mark C. & Wilma F.	NE	SW	9	22	21	40.39			0.00	0.00		
57445	15277	I&D	Carr, Mark C. & Wilma F.	SW	SW	9	22	21	40.26			30.00	5.45		Garlic
57445	15277	I&D	Carr, Mark C. & Wilma F.	SE	SW	9	22	21	40.24			30.00	5.45		Onion

WARM SPRINGS VALLEY CENTRAL: 1999

**PERMIT STAT MOU**

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP	UNITS USED	DUTY USED	MCO	PAR#	REMARKS / CULTURE
				Q1	Q2	SEC	T								
57445	15277	I&D	Carr, Mark C. & Wilma F.	NW	SE	9	22	21	40.32			37.00	6.72	Onion	
57445	15277	I&D	Carr, Mark C. & Wilma F.	SW	SE	9	22	21	40.20			37.00	6.72	Onion	
57445	15277	I&D	Carr, Mark C. & Wilma F.	NW	NW	16	22	21	40.18			12.00	2.18	Turf	
57445	15277	I&D	Carr, Mark C. & Wilma F.	NE	NW	16	22	21	27.42			18.00	3.27	Turf	
57445	15277	I&D	Carr, Mark C. & Wilma F.						6.00	24.00		170.50	30.98	MCO well #5	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NW	SE	8	22	21	1.74			0.00	0.00		
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NE	SE	8	22	21	35.42			4.00	0.63	Seed test plot	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	SE	SE	8	22	21	12.05			2.50	0.39	Garlic	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NW	SW	9	22	21	40.36			0.00	0.00		
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NE	SW	9	22	21	40.39			0.00	0.00	Seed test plot	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	SW	SW	9	22	21	40.26			30.00	4.72	Garlic	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	SE	SW	9	22	21	40.24			30.00	4.72	Onion	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NW	SE	9	22	21	40.32			37.00	5.83	Onion	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	SW	SE	9	22	21	40.20			37.00	5.83	Onion	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NW	NW	16	22	21	40.18			12.00	1.89	Turf	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma	NE	NW	16	22	21	27.42			18.00	2.83	Turf	
57446	15278	I&D	Carr, Fred & Carr, Mark & Wilma						5.20	20.80		170.50	26.85	MCO well #5	
57447	15279	IRR	Carr, Mark C. & Wilma F.	NW	SE	8	22	21	1.74			0.00	0.00		
57447	15279	IRR	Carr, Mark C. & Wilma F.	NE	SE	8	22	21	35.42			4.00	0.42	Seed test plot	
57447	15279	IRR	Carr, Mark C. & Wilma F.	SE	SE	8	22	21	12.05			2.50	0.26	Garlic	
57447	15279	IRR	Carr, Mark C. & Wilma F.	NW	SW	9	22	21	40.35			0.00	0.00		
57447	15279	IRR	Carr, Mark C. & Wilma F.	NE	SW	9	22	21	40.39			0.00	0.00	Seed test plot	
57447	15279	IRR	Carr, Mark C. & Wilma F.	SW	SW	9	22	21	40.26			30.00	3.18	Garlic	
57447	15279	IRR	Carr, Mark C. & Wilma F.	SE	SW	9	22	21	40.24			30.00	3.18	Onion	
57447	15279	IRR	Carr, Mark C. & Wilma F.	NW	SE	9	22	21	40.32			37.00	3.92	Onion	
57447	15279	IRR	Carr, Mark C. & Wilma F.	SW	SE	9	22	21	40.20			37.00	3.92	Onion	
57447	15279	IRR	Carr, Mark C. & Wilma F.	NW	NW	16	22	21	40.18			12.00	1.27	Turf	
57447	15279	IRR	Carr, Mark C. & Wilma F.	NE	NW	16	22	21	27.42			18.00	1.91	Turf	
57447	15279	IRR	Carr, Mark C. & Wilma F.						3.50	13.97		170.50	18.07	MCO well #5; Duty of base rt. = 3.99114 AF/AC	
57448	15280	I&D	Carr, Mark C. & Wilma F.	NW	SE	8	22	21	1.74			0.00	0.00		
57448	15280	I&D	Carr, Mark C. & Wilma F.	NE	SE	8	22	21	35.42			4.00	0.17	Seed test plot	
57448	15280	I&D	Carr, Mark C. & Wilma F.	SE	SE	8	22	21	12.05			2.50	0.10	Garlic	

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			Q1	Q2	SEC	T	R	ACRES	UNITS/ (AF)	DUTY ADJ.	SUPP ADJ.	UNITS USED	DUTY USED	MCO USED	PAR #	REMARKS / CULTURE

57448	15280	I&D	Carr, Mark C. & Wilma F.	NW	SW	9	22	21	40.35				0.00	0.00						
57448	15280	I&D	Carr, Mark C. & Wilma F.	NE	SW	9	22	21	40.39				0.00	0.00						
57448	15280	I&D	Carr, Mark C. & Wilma F.	SW	SW	9	22	21	40.26				30.00	1.25						Garlic
57448	15280	I&D	Carr, Mark C. & Wilma F.	SE	SW	9	22	21	40.24				30.00	1.25						Onion
57448	15280	I&D	Carr, Mark C. & Wilma F.	NW	SE	9	22	21	40.32				37.00	1.54						Onion
57448	15280	I&D	Carr, Mark C. & Wilma F.	SW	SE	9	22	21	40.20				37.00	1.54						Onion
57448	15280	I&D	Carr, Mark C. & Wilma F.	NW	NW	16	22	21	40.18				12.00	0.50						Turf
57448	15280	I&D	Carr, Mark C. & Wilma F.	NE	NW	16	22	21	27.42				18.00	0.75						Turf
57448	15280	I&D							1.38	5.50			170.50	7.10						MCO well #5; Actually 1.375 ac.

57664	PER	I&D	Cieri, Diane & Richard J.	NW	SE	16	22	21	2.00	8.00			2.00	8.63						
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57899	E-PER	ENV	Rockwell International Corporation	E2		12	22	21	**		80.65		**		13.78					
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58507	14042	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	1.46				1.46	3.23					
58507	14042	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.78				0.78	1.73					
58507	14042	IRR							2.24	8.96			2.24	4.95					

58508	14043	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	8.43				8.43	18.64					
58508	14043	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	4.57				4.57	10.11					
58508	14043	IRR							13.00	52.00			13.00	28.75					

58509	14044	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	0.37				0.37	0.82					
58509	14044	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.28				0.28	0.62					
58509	14044	IRR							0.65	2.60			0.65	1.44					

60916	E-PER	ENV	Rockwell International Corporation			7	22	22												
60916	E-PER	ENV	Rockwell International Corporation			E2	12	22	21											
60916	E-PER	ENV	Rockwell International Corporation			SW	12	22	21											
60916	E-PER	ENV	Rockwell International Corporation			SE	11	22	21											
60916	E-PER	ENV	Rockwell International Corporation			N2	13	22	21											
60916	E-PER	ENV	Rockwell International Corporation			NE	14	22	21											
60916	E-PER	ENV							**	322.87			**	49.12						

61923	PER	I&D	Cochrane, Jack	NE	SE	9	22	21					0.00	0.00						
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## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS	DUTY USED	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
61923	PER	I&D	Cochrane, Jack	NW	NW	10	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	NE	NE	16	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	SE	NE	16	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	SW	NW	15	22	21			25.00	19.41			
61923	PER	I&D	Cochrane, Jack	NE	SW	15	22	21			40.00	31.06			
61923	PER	I&D	Cochrane, Jack	NW	SW	15	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	SW	SW	15	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	SE	SW	15	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack	SE	SW	15	22	21			0.00	0.00			
61923	PER	I&D	Cochrane, Jack						10.00	40.00		65.00	50.47		
62598	PER	IRR	Washoe County	E2	SE	9	22	21							
62598	PER	IRR	Washoe County	NW	NW	10	22	21							
62598	PER	IRR	Washoe County	SW	NW	15	22	21							
62598	PER	IRR	Washoe County		SW	15	22	21							
62598	PER	IRR	Washoe County	E2	E2	16	22	21							
62598	PER	IRR							2.00	8.00		0.00	0.00		Meter required
62599	PER	IRR	Palomino Valley Estates & Washoe Co	E2	SE	9	22	21							
62599	PER	IRR	Palomino Valley Estates & Washoe Co	NW	NW	10	22	21							
62599	PER	IRR	Palomino Valley Estates & Washoe Co	SW	NW	15	22	21							
62599	PER	IRR	Palomino Valley Estates & Washoe Co.		SW	15	22	21							
62599	PER	IRR	Palomino Valley Estates & Washoe Co	E2	E2	16	22	21							
62599	PER	IRR							2.00	8.00		1.50	2.25		
62600	PER	IRR	Palomino Valley Estates, Inc.	E2	SE	9	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	NW	NW	10	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	SW	NW	15	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.		SW	15	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	E2	E2	16	22	21							
62600	PER	IRR							2.00	8.00		1.50	2.25		
62601	PER	IRR	Cochrane, Jack	NE	SE	9	22	21							
62601	PER	IRR	Cochrane, Jack	NW	NW	10	22	21							
62601	PER	IRR	Cochrane, Jack	NE	NE	16	22	21							
62601	PER	IRR							2.00	8.00		2.00	3.00		
															Same well as 40587; Meter failed, submitted data.

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				Q1	Q2	SEC	T	R	ACRES	(AF)	DUTY ADJ.	SUPP ADJ.	UNITS	DUTY USED	MCO USED	DUTY PAR #	REMARKS / CULTURE
				SE	NE	SW	NW														
62601	PER	IRR	Cochrane, Jack	SE	NE	16	22	21									0.00	0.00			
62601	PER	IRR	Cochrane, Jack	SW	NW	15	22	21									25.00	29.12			Garlic
62601	PER	IRR	Cochrane, Jack	NE	SW	15	22	21									40.00	46.59			Garlic
62601	PER	IRR	Cochrane, Jack	NW	SW	15	22	21									0.00	0.00			
62601	PER	IRR	Cochrane, Jack	SW	SW	15	22	21									0.00	0.00			
62601	PER	IRR	Cochrane, Jack	SE	SW	15	22	21									0.00	0.00			
62601	PER	IRR														15.00	60.00				
62602	PER	IRR	Cochrane, Jack	NE	SE	9	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	NW	NW	10	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	NE	NE	16	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	SE	NE	16	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	SW	NW	15	22	21									25.00	6.39			Garlic
62602	PER	IRR	Cochrane, Jack	NE	SW	15	22	21									40.00	10.22			Garlic
62602	PER	IRR	Cochrane, Jack	NW	SW	15	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	SW	SW	15	22	21									0.00	0.00			
62602	PER	IRR	Cochrane, Jack	SE	SW	15	22	21									0.00	0.00			
62602	PER	IRR														3.29	13.16				
62603	PER	IRR	Cochrane, Jack	NE	SE	9	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	NW	NW	10	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	NE	NE	16	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	SE	NE	16	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	SW	NW	15	22	21									25.00	0.41			Garlic
62603	PER	IRR	Cochrane, Jack	NE	SW	15	22	21									40.00	0.65			Garlic
62603	PER	IRR	Cochrane, Jack	NW	SW	15	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	SW	SW	15	22	21									0.00	0.00			
62603	PER	IRR	Cochrane, Jack	SE	SW	15	22	21									0.00	0.00			
62603	PER	IRR														0.21	0.84				
62604	PER	IRR	Cochrane, Jack	NE	SE	9	22	21									65.00	1.06			
62604	PER	IRR	Cochrane, Jack	NW	NW	10	22	21									0.00	0.00			
62604	PER	IRR	Cochrane, Jack	NE	NE	16	22	21									0.00	0.00			
62604	PER	IRR	Cochrane, Jack	SE	NE	16	22	21									0.00	0.00			
62604	PER	IRR	Cochrane, Jack	SW	NW	15	22	21									25.00	19.41			Garlic

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			Q1	Q2	SEC	T	R	ACRES	(AF)	DUTY ADJ.	SUPP ADJ.	UNITS USED	DUTY USED	MCO	PAR #	REMARKS / CULTURE	
				NE	SW	15 22 21															
62604	PER	IRR	Cochrane, Jack	NE	SW	15 22 21											40.00	31.06			
62604	PER	IRR	Cochrane, Jack	NW	SW	15 22 21											0.00	0.00			
62604	PER	IRR	Cochrane, Jack	SW	SW	15 22 21											0.00	0.00			
62604	PER	IRR	Cochrane, Jack	SE	SW	15 22 21											0.00	0.00			
62604	PER	IRR															10.00	40.00			
62605	PER	IRR	Cochrane, Jack	NE	SE	9 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	NW	NW	10 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	NE	NE	16 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	SE	NE	16 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	SW	NW	15 22 21											25.00	9.70			
62605	PER	IRR	Cochrane, Jack	NE	SW	15 22 21											40.00	15.53			
62605	PER	IRR	Cochrane, Jack	NW	SW	15 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	SW	SW	15 22 21											0.00	0.00			
62605	PER	IRR	Cochrane, Jack	SE	SW	15 22 21											0.00	0.00			
62605	PER	IRR															5.00	20.00			
62605	PER	IRR															65.00	25.23			
62606	PER	IRR	Cochrane, Jack	NE	SE	9 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	NW	NW	10 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	NE	NE	16 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	SE	NE	16 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	SW	NW	15 22 21											25.00	9.71			
62606	PER	IRR	Cochrane, Jack	NE	SW	15 22 21											40.00	15.53			
62606	PER	IRR	Cochrane, Jack	NW	SW	15 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	SW	SW	15 22 21											0.00	0.00			
62606	PER	IRR	Cochrane, Jack	SE	SW	15 22 21											0.00	0.00			
62606	PER	IRR															5.00	20.00			
62606	PER	IRR															65.00	25.23			
62640	PER	IRR	Phungphiphadhana, Steph & Spence	NE	SE	14 22 21															
62640	PER	IRR	Phungphiphadhana, Steph & Spence	NW	SE	14 22 21															
62640	PER	IRR															0.50	2.00			
62641	PER	IRR	Phungphiphadhana, Steph & Spence	NE	SE	14 22 21															
62641	PER	IRR	Phungphiphadhana, Steph & Spence	NW	SE	14 22 21															
62641	PER	IRR															2.50	10.00			
30																					

No well; Meter required

No well; Meter required

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS	DUTY USED	MCO	PAR #	REMARKS / CULTURE
				Q1	Q2	SEC	T								
62771	PER	IRR	Cochrane, Jack		NE	SE	9	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		NW	NW	10	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		NE	NE	16	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		SE	NE	16	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		SW	NW	15	22	21			25.00	23.21		Garlic
62771	PER	IRR	Cochrane, Jack		NE	SW	15	22	21			40.00	37.13		Garlic
62771	PER	IRR	Cochrane, Jack		NW	SW	15	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		SW	SW	15	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack		SE	SW	15	22	21			0.00	0.00		
62771	PER	IRR	Cochrane, Jack					11.96	47.82			65.00	60.34		
62772	PER	IRR	Cochrane, Jack		NE	SE	9	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		NW	NW	10	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		NE	NE	16	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		SE	NE	16	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		SW	NW	15	22	21			25.00	3.92		
62772	PER	IRR	Cochrane, Jack		NE	SW	15	22	21			40.00	6.27		Garlic
62772	PER	IRR	Cochrane, Jack		NW	SW	15	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		SW	SW	15	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack		SE	SW	15	22	21			0.00	0.00		
62772	PER	IRR	Cochrane, Jack					2.02	8.08			65.00	10.19		
62889	PER	IRR	Tehama Holdings Inc.		SW	NE	8	22	21	21.87		20.00	8.36		
62889	PER	IRR	Tehama Holdings Inc.		SE	NE	8	22	21	40.26		40.00	16.72		Turf
62889	PER	IRR	Tehama Holdings Inc.		NE	NW	9	22	21	35.00		35.00	14.63		Turf
62889	PER	IRR	Tehama Holdings Inc.		NW	NW	9	22	21	35.00		35.00	14.63		Turf
62889	PER	IRR	Tehama Holdings Inc.		S2	N2	9	22	21	161.81		160.00	66.89		Turf
62889	PER	IRR	Tehama Holdings Inc.					20.00	80.00			290.00	121.24		Well WT-1
62890	PER	IRR	Fahnestock Enterprises, Inc.		SW	NE	8	22	21	21.87		20.00	56.44		
62890	PER	IRR	Fahnestock Enterprises, Inc.		SE	NE	8	22	21	40.26		40.00	112.88		Turf
62890	PER	IRR	Fahnestock Enterprises, Inc.		NE	NW	9	22	21	35.00		35.00	98.77		Turf
62890	PER	IRR	Fahnestock Enterprises, Inc.		NW	NW	9	22	21	35.00		35.00	98.77		Turf
62890	PER	IRR	Fahnestock Enterprises, Inc.		S2	N2	9	22	21	161.81		160.00	451.53		Turf

## WARM SPRINGS VALLEY CENTRAL: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY MCO	REMARKS / CULTURE
				Q1	Q2	SEC	T						
62890	PER	IRR						135.00	540.00		290.00	818.40	Well WT-1
62898	PER	I&D	Lopez-Gonzalez, Max & Gail	SW	NE	4	22	21	1.00	4.00	0.00	0.00	No well; Meter required
63064	PER	I&D	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	2.00	8.00	37.75	6.13	Garlic; Same well as 63065; TCD=151 AFA/37.75 ac.
63065	PER	I&D	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	2.75	11.00	37.75	8.43	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63070	E-PER	ENV	Rockwell International Corporation	SE	18	22	22	**	48.39	**	12.57		Meter and reporting required
63071	E-PER	ENV	Rockwell International Corporation	SE	18	22	22	**	48.39	**	19.57		Meter and reporting required
63072	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	1.00	4.00	37.75	3.06	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63074	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	1.50	6.00	37.75	4.60	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63203	PER	IRR	Fahnestock Enterprises, Inc.	SW	NE	8	22	21	21.87		20.00	1.43	Turf
63203	PER	IRR	Fahnestock Enterprises, Inc.	SE	NE	8	22	21	40.26		40.00	2.85	Turf
63203	PER	IRR	Fahnestock Enterprises, Inc.	NE	NW	9	22	21	35.00		35.00	2.49	Turf
63203	PER	IRR	Fahnestock Enterprises, Inc.	NW	NW	9	22	21	35.00		35.00	2.49	Turf
63203	PER	IRR	Fahnestock Enterprises, Inc.	S2	N2	9	22	21	161.81		160.00	11.40	Turf
63203	PER	IRR						48.00	192.00		290.00	20.67	MCO #4
63222	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	4.75	19.00	37.75	14.55	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63223	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	5.00	20.00	37.75	15.32	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63455	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	5.00	20.00	37.75	15.32	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63456	PER	IRR	Hayes, Edward J. & Constance G.	NW	NE	9	22	21	1.00	4.00	37.75	3.06	Garlic; Same well as 63064; TCD=151 AFA/37.75 ac.
63518	PER	Q-M	Palomino Valley G.I.D.	NW	SE	32	23	21	**	8.00	**	9.90	Road maintenance
63519	PER	IRR	Wright, Wanda C.	SW	SW	29	23	21	0.28	1.12	0.00	0.37	No irrigation, essentially domestic use.

WARM SPRINGS VALLEY CENTRAL: 1999

BENAKS / CHI TIBE

## WARM SPRINGS VALLEY SOUTH: 1999

PERMIT ST#	MOU	PERMITTEE	PLACE OF USE						DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
			Q1	Q2	SEC	T	R	ACRES					
34668	101	I&D Garador Brothers	NE	25	22	20		2.00	8.00		2.00	3.10	Alfalfa; ½ Ac. trees not in POU
43006	111	I&D Sendall Family Trust	NE	NW	34	22	21	2.00	8.00		2.00	8.00	Pasture & rye; Meter not required
50054	132	I&D McGuire, Kenneth L. & Sue C.	SE	NW	27	22	21	2.50	10.00		2.50	4.85	Alfalfa
50056	132	I&D Washoe County	SE	SE	36	22	20	1.00	4.00		0.00	0.00	Domestic and landscaping only.
50764	15	I&D Meredith, Marjorie	SW	NW	3	21	22						
50764	16	I&D Meredith, Marjorie	NW	SW	3	21	22						
50764	15	I&D						6.00	24.00		2.00	0.00	
52202	15	IRR Avila, Robert J.	NW	SE	22	22	21	4.00	16.00		4.00	15.13	Alfalfa; Same well as 52842; Estimate due to meter difficulty.
52842	15	I&D Avila, Robert J.	NW	SE	22	22	21	1.00	4.00		1.00	3.78	Alfalfa; Same well as 52202
52868	117	I&D Wendland, Dave & Donna	NW	NE	21	22	21	13.00	52.00		13.00	33.98	Alfalfa; Same well as 52869 & 53263
52869	117	I&D Wendland, Dave & Donna	NW	NE	21	22	21	7.00	28.00		7.00	18.30	Alfalfa; Same well as 52868 & 53263
53243	111	IRR Palomino Valley GID	NE	NW	23	22	21	0.25	1.00		0.00	0.00	Meter required
53263	13918	I&D Champion, Milton E. & Phyllis C.	NW	NE	21	22	21	5.00	20.00		5.00	13.08	Alfalfa; Same well as 52868 & 52869
53275	14073	I&D Solari, John A. & Sheila L.	NE	NW	30	22	21	1.00	4.00		1.00	4.11	Pasture grass; Same well as 56472
53277	ABR	I&D Rowe, Evelyn K. & Richard J.	SW	SW	30	22	21	0.00	0.00		0.00	0.00	Changed by 64265; Central area.
53278	PER	IRR Gleason, Gleason & Speck	SW	SW	30	22	21	2.50	10.00		0.00	0.00	Meter required
53343	PER	I&D Walker, Urton & Washoe County	NW	SE	30	22	22				0.26	0.23	
53343	PER	I&D Walker, Urton & Washoe County	SW	SE	30	22	22				0.25	0.23	12.5 AFA dedicated to Washoe County
53343	PER	I&D									4.00	16.00	
53347	ABR	I&D Macaluso, Giuseppe & Mary	NE	NW	24	22	20				0.50	0.46	Pasture

## WARM SPRINGS VALLEY SOUTH: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				Q1	Q2	SEC	T	R	ACRES	(AF)	DUTY SUPP ADJ.	UNITS USED	DUTY SUPP ADJ.	UNITS USED	REMARKS	
				NW	NW	24	22													
53347	ABR	I&D	Macaluso, Giuseppe & Mary													0.00	0.00	0.00	0.00	Changed by 64067; This area.
53347	ABR	I&D																		
53676	ABR	I&D	Lee, Wallace & Clara	SE	SE	25	22	20		0.00	0.00					0.00	0.00	0.00	0.00	Changed by 64266; Central area.
53694	ABR	I&D	Jones, Gregory W. & Laura	SW	SE	24	22	20												
53694	ABR	I&D	Jones, Gregory W. & Laura	SE	SE	24	22	20												Actually 2.375 acres
53694	ABR	I&D																		
53864	PER	I&D	Washoe County	NE	SE	19	22	22												
53864	PER	I&D	Washoe County	NE	SW	19	22	22												
53864	PER	I&D	Washoe County	NW	SW	19	22	22												
53864	PER	I&D																		
54167	PER	I&D	Chang, Cherk H. & Jirovsky, James C.	SE	SE	13	22	20		0.00	0.00					0.00	0.00	0.00	0.00	Meter required
54265	PER	I&D	Washoe County	NW	NW	25	22	21		0.25	1.00					0.00	0.00	0.00	0.00	Meter required; Domestic use only from well.
54412	ABR	I&D	Lee, Wallace & Clara	SE	SE	25	22	20		0.00	0.00					0.00	0.00	0.00	0.00	Changed by 64268; Central area.
54413	ABR	I&D	Palimino Valley Estates, Inc.	SW	SE	36	22	20												
54413	ABR	I&D	Palimino Valley Estates, Inc.	NW	SE	36	22	20												
54413	ABR	I&D	Palimino Valley Estates, Inc.	NE	SW	36	22	20												
54413	ABR	I&D	Palimino Valley Estates, Inc.	SE	SW	36	22	20												
54413	ABR	I&D																		
55326	PER	I&D	Hallbauer, John B. & Sybal I.	NE	NE	21	22	21		2.00	8.00					0.00	0.00	0.00	0.00	Meter required
55483	PER	I&D	Brown, Donald & Carmen & Washoe C SE	SW	25	22	20													
55483	PER	I&D	Brown, Donald & Carmen & Washoe C SW	SE	25	22	20													
55483	PER	I&D	Brown, Donald & Carmen & Washoe C NW NE	NE	36	22	20									0.50	1.57	1.57	1.57	Washoe County par. is 2.5 acre-feet
55483	PER	I&D	Brown, Donald & Carmen & Washoe C NE NW	NW	36	22	20									1.00	4.00	0.50	1.57	Meter required
55656	14987	IRR	Iacometti, Patrick R. Patricia A.	SW	NE	24	22	20		1.00						1.00	0.75			

## WARM SPRINGS VALLEY SOUTH: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
				Q1 Q2 SEC T R	ACRES					

55656	14987	IRR	Iacometti, Patrick R. Patricia A.	SE NE	24 22	20	6.00	1.00	4.00	6.00	4.53
55656	14987	IRR									Orchard & garden
56284	PER	I&D	Newell Revocable Living Trust	NW SE	6	21	22				
56284	PER	I&D	Newell Revocable Living Trust	SW SE	6	21	22				
56284	PER	I&D	Newell Revocable Living Trust	NW NE	7	21	22				
56284	PER	I&D	Newell Revocable Living Trust	SW NE	7	21	22				
56284	PER	I&D						3.00	12.00	0.00	Metered! Bare foundation.
56472	PER	I&D	Solari, John A. & Sheila L.	NE NW	30	22	21	1.00	4.00	1.00	4.11 Planted in pasture grass; Same well as 53275
56576	PER	I&D	Walkins, John L.	SW NW	25	22	21				
56576	PER	I&D	Walkins, John L.	NW SW	25	22	21				
56576	PER	I&D						1.00	4.00	0.75	2.89 Pasture grass
56927	PER	I&D	Washoe County	NE NW	30	22	22				
56927	PER	I&D	Washoe County	SE NW	30	22	22				
56927	PER	I&D	Washoe County	NE SW	30	22	22				
56927	PER	I&D						1.25	5.00	0.00	0.00 Meter required; House stables & landscaping
57526	PER	I&D	Washoe County	NE NE	1	21	20				
57526	PER	I&D	Washoe County	NW NE	1	21	20				
57526	PER	I&D	Washoe County	NE NW	1	21	20				
57526	PER	I&D						1.00	4.00	0.00	0.00 Meter required
57983	PER	I&D	Shreck, James L. & Connie M.	W2 SW	9	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	SE SW	9	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	SE SE	8	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	N2 NW	16	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	SW NW	16	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	N2 SW	16	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	NE NE	17	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	SW NE	17	21	22				
57983	PER	I&D	Shreck, James L. & Connie M.	SE NE	17	21	22				
57983	PER	I&D						1.00	4.00	1.00	0.62 Pasture, several bldgs. & ranch yard

## WARM SPRINGS VAI I.EY SOUTH: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/		DUTY (AF)	SUPP	UNITS	DUTY	REMARKS
				Q1	Q2	SEC	T	R	ACRES					
58057	PER	I&D	Washoe County		NE	NE	1	21	20					
58057	PER	I&D	Washoe County		NW	NE	1	21	20					
58057	PER	I&D	Washoe County		NE	NW	1	21	20					
58057	PER	I&D								0.25	1.00	0.00	0.00	Meter required
58359	PER	IRR	Speck, Gene E.		NE	NE	20	22	21					
58359	PER	IRR	Speck, Gene E.		NW	NE	20	22	21					
58359	PER	IRR	Speck, Gene E.		NE	NW	20	22	21					
58359	PER	IRR	Speck, Gene E.		NW	NW	20	22	21					
58359	PER	IRR								1.25	5.00	0.00	0.00	Meter required
58918	PER	I&D	Walker, Ramon G., et al		NE	NE	12	21	21					
58918	PER	I&D	Walker, Ramon G., et al		SE	NE	12	21	21					
58918	PER	I&D								1.00	4.00	1.00	0.00	No well
60629	PER	IRR	McQuatters, Paula R. & William F.		NE	NE	34	22	21					
60629	PER	IRR	McQuatters, Paula R. & William F.		NE	NE	34	22	21					
60629	PER	IRR	McQuatters, Paula R. & William F.		NE	NE	34	22	21					
60975	E-PER	ENV	Rockwell International Corporation		SW	SW	28	22	21					
60975	E-PER	ENV	Rockwell International Corporation		NE	SE	29	22	21					
60975	E-PER	ENV								**	16.13	**	0.66	Pumped volume reported quarterly
62425	PER	I&D	Capurro, George J. & Elaine Kinerson	SW	NE	25	22	20						
62425	PER	I&D	Capurro, George J. & Elaine Kinerson	SE	NE	25	22	20						
62425	PER	I&D								10.00	40.00	27.00	89.28	
62643	PER	IRR	Messenger Molding, Inc.	SW	SE	24	22	20		1.25	5.00	0.00	0.00	Meter required
62644	PER	IRR	Messenger Molding, Inc.	SW	SE	24	22	20		2.50	10.00	0.00	0.00	Meter required
63139	PER	IRR	Maykovich, John & Minako	NE	SE	7	21	22						
63139	PER	IRR	Maykovich, John & Minako	NW	SE	7	21	22						
63139	PER	IRR	Maykovich, John & Minako	SW	SE	7	21	22						

## WARM SPRINGS VALLEY SOUTH: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				Q1	Q2	SEC	T	R	ACRES	(AF)	DUTY	SUPP	UNITS	DUTY	REMARKS
				SE	SE	7	21								2.00	8.00	0.00	0.00	Meter required
63139	PER	IRR	Maykovich, John & Minako																
63139	PER	IRR																	
63221	PER	IRR	Zenz, Donald J. & Donna R.	SE	SW	23	22	21											
63221	PER	IRR	Zenz, Donald J. & Donna R.	SE	SW	23	22	21											
63221	PER	IRR	Zenz, Donald J. & Donna R.	SE	SW	23	22	21											
63515	PER	Q-M	Palomino Valley G.I.D.	NW	NE	21	22	21											
63517	PER	Q-M	Palomino Valley G.I.D.	NW	NE	21	22	21											
64011	PER	IRR	F & M Family Trust	SW	SE	19	22	21											
64067	PER	COM	Macaluso, Giuseppe	NE	NW	24	22	20											
64812	PER	IRR	Walker, Ramon G., et al	SW	SE	36	22	20											
DOMESTIC WELLS								199								222.88 Duty = 1.12 AF per well (1000 gal./day)			
COLUMN TOTALS								364.13				0.00				439.40			
DUTY TOTALS								364								439			

## WARM SPRINGS VALLEY WEST: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				Q1 ACRES	Q2 ACRES	T ACRES	R ACRES	DUTY (AF)	SUPP ADJ.	UNITS/ USED	DUTY USED	REMARKS
				SW	SE	NE	SW									
27395	9317	REC	Air Sailing, Inc.	SW	SE	NE	SW	29	23	20		8.01		10	0.58	Travel trailers and shop (same POD as 35565).
35565	11087	REC	Air Sailing, Inc.	SW	SE	NE	SW	29	23	20		0.16		0.01	Same service and POD as 27395.	
39593	PER	I&D	Marshall, Robert W. & Nanette	NW	SW	29	24	20								
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	SW	29	24	20								
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	NW	29	24	20								
39593	PER	I&D	Marshall, Robert W. & Nanette	E2	30	24	20									Supplemental to surface rights
39593	PER	I&D	Marshall, Robert W. & Nanette	N2	32	24	20									
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	NW	33	24	20								
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	33	24	20									
39593	PER	I&D	Marshall, Robert W. & Nanette	NW	NE	4	23	20								
39593	PER	I&D														
39	39849	PER	REC Washoe County	NE	SE	18	23	21					20.00		0.51	Regional shooting facility.
45095	10798	I&D	Hildenbrand, Thomas R. & Jacqueline	NE	NE	2	22	20					2.00	2.00	8.68	Alfalfa; Same POD as 51002
47562	12057	I&D	Bailey, Wayne E.	NE	SE	35	23	20					4.00	4.00	14.40	Pasture and wood lot.
47599	13820	IRR	Polizzi, Lewis H. & Nora	NW	SW	1	22	20					3.29	3.29	0.67	Orchard, reduced duty per acre.
48819	12354	STK	Intermountain Land Company	SW	SW	8	21	20					350	350	1.42	Cattle: Oct. 1 to May 30.
49445	13822	IRR	Moore, Dennis R. - et al.	NE	SE	15	22	20					12.00	12.00	0.00	0.01 Alfalfa.
49669	11974	IRR	Intermountain Land Company	NW	NE	22	23	20							0.00	0.00 Supplemental to 49670
49669	11974	IRR	Intermountain Land Company	SW	NE	22	23	20							33.26	44.72 Alfalfa
49669	11974	IRR	Intermountain Land Company	SE	NE	22	23	20							2.40	3.23 Alfalfa
49669	11974	IRR	Intermountain Land Company	NE	NW	22	23	20							0.00	0.00
49669	11974	IRR	Intermountain Land Company	SE	NW	22	23	20							46.37	62.35 Alfalfa
49669	11974	IRR														
49670	11975	IRR	Intermountain Land Company	NW	NE	22	23	20					82.03	82.03	110.30	Certificated duty = 1.7587 AF/ac.
49670	11975	IRR	Intermountain Land Company	SW	NE	22	23	20							0.00	0.00 Supplemental to 49669
															33.26	56.99 Alfalfa; Port. ABR by 62166-T, exp. 10-27-97

## WARM SPRINGS VALLEY WEST: 1999

PERMIT			STAT MOU			PERMITTEE			PLACE OF USE			UNITS/ACRES			DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS		
PERMIT	STAT	MOU	PERMIT	STAT	MOU	Q1	Q2	SEC	T	R	ACRES	Q1	Q2	SEC	T	R	ACRES	ADJ.	USED	ADJ.	USED

49670	11975	IRR	Intermountain Land Company			SE	NE	22	23	20	2.40					2.40	4.11	Alfalfa
49670	11975	IRR	Intermountain Land Company			NE	NW	22	23	20	46.62					0.00	0.00	
49670	11975	IRR	Intermountain Land Company			SE	NW	22	23	20	46.37					46.37	79.46	Alfalfa
49670	11975	IRR									133.85	300.00				82.03	140.56	Certificated duty = 2.2413 AF/ac.
51002	13241	I&D	Hildenbrand, Thomas R. & Jacqueline	NE	NE	NE	2	22	20	3.00	12.00					3.00	13.02	Same POD as 45095
52089	PER	Q-M	Reno-Sparks Indian Colony	SE	NW	4	21	20			18.38					149	0.00	Supplemental to 53313 & 60214
53313	PER	Q-M	Reno-Sparks Indian Colony	NE	NW	4	21	20			183.70	18.38				149	59.43	Supplemental to 52089 & 60214
53346	PER	I&D	Carter & Washoe County	NE	SW	12	22	20										
53346	PER	I&D	Carter & Washoe County	NW	SW	12	22	20										
53346	PER	I&D									1.00	4.00				0.50	3.29	Landscaping, no crop
53677	14074	IRR	Wyatt, Dennis D.	SW	SW	26	23	20	1.30	5.20						0.00	0.00	No crop, alligator cribs; Same POD as 53678
53678	14075	IRR	Wyatt, Dennis D.	SW	SW	26	23	20	16.70	66.80						0.00	0.02	No crop, alligator cribs; Same POD as 53677
54166	PER	I&D	Guidera, Leslie C.	SE	SE	35	23	20	3.00	12.00								
54411	ABR	I&D	Hayes, Constance G. & Edward J.	SE	NW	30	23	21										
54411	ABR	I&D	Hayes, Constance G. & Edward J.	NE	SW	30	23	21										
54411	ABR	I&D	Hayes, Constance G. & Edward J.	SE	SW	30	23	21										
54411	ABR	I&D		O	O											0.00	0.00	Changed by 64501; Central area.
54614	PER	I&D	Herold, Carl & Lurinda	NE	NE	14	23	20								0.50	1.98	
54614	PER	I&D	Herold, Carl & Lurinda	SE	NE	14	23	20								0.50	1.65	
54614	PER	I&D																
54615	PER	I&D	Fischer, Frances J.	NE	NE	14	23	20								0.50	1.65	
54615	PER	I&D	Fischer, Frances J.	SE	NE	14	23	20										
54615	PER	I&D																
54616	PER	I&D	Fischer, Frances J.	NE	NE	14	23	20								0.50	1.09	

## WARM SPRINGS VALLEY WEST: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE				UNITS/			DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY ADJ. USED	REMARKS
				Q1	Q2	SEC	T	R	ACRES						
54616	PER	I&D	Fischer, Frances J.	SE	NE	14	23	20		1.00	4.00		0.50	1.09	Meter required
54616	PER	I&D													
54889	14080	IRR	Dennis, Gregory E. & Michelle C.	SW	NE	36	23	20		2.50	10.00		2.50	8.03	House and landscaping
56164	PER	I&D	Washoe County	SE	SW	12	22	20							
56164	PER	I&D	Washoe County	SW	SW	12	22	20							
56164	PER	I&D	Washoe County	SW	SE	12	22	20							
56164	PER	I&D	Washoe County	SE	SE	12	22	20							
56164	PER	I&D													
56930	PER	IRR	Stinson, George W.	NW	NE	6	22	21							
56930	PER	IRR	Stinson, George W.	SW	NE	6	22	21							
56930	PER	IRR	Stinson, George W.	NE	NW	6	22	21							
56930	PER	IRR	Stinson, George W.	SW	NW	6	22	21							
56930	PER	IRR	Stinson, George W.	SE	NW	6	22	21							
56930	PER	IRR													
56931	PER	IRR	Stinson, George W.	NW	NE	6	22	21							
56931	PER	IRR	Stinson, George W.	SW	NE	6	22	21							
56931	PER	IRR	Stinson, George W.	NE	NW	6	22	21							
56931	PER	IRR	Stinson, George W.	SW	NW	6	22	21							
56931	PER	IRR	Stinson, George W.	SE	NW	6	22	21							
56931	PER	IRR													
56934	PER	IRR	Stinson, George W.	NW	NE	6	22	21							
56934	PER	IRR	Stinson, George W.	SW	NE	6	22	21							
56934	PER	IRR	Stinson, George W.	NE	NW	6	22	21							
56934	PER	IRR	Stinson, George W.	SW	NW	6	22	21							
56934	PER	IRR	Stinson, George W.	SE	NW	6	22	21							
56934	PER	IRR													
56963	PER	IRR	Stinson, George W.	NW	NE	6	22	21							
56963	PER	IRR	Stinson, George W.	SW	NE	6	22	21							
56963	PER	IRR	Stinson, George W.	NE	NW	6	22	21							

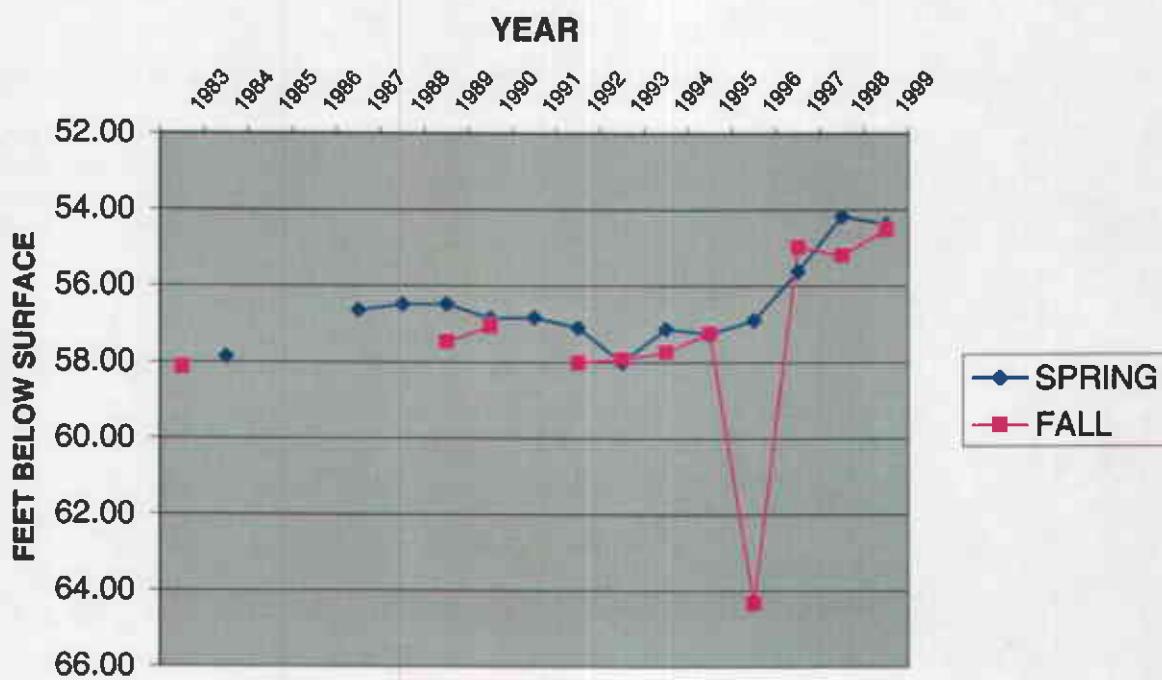
## WARM SPRINGS VALLEY WINST: 1999

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE			Q1	Q2	SEC	T	R	ACRES	(AF)	DUTY ADJ.	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
				SW	NW	6	22	21	SE	NW	6	22	21	SE	SW	6	22	21
56963	PER	IRR	Stinson, George W.															
56963	PER	IRR	Stinson, George W.															
56963	PER	IRR																
60214	PER	Q-M	Reno-Sparks Indian Colony	NE	NW	4	21	20										
62642	PER	IRR	Jorgensen, Jerry R. & Laury R.	NE	NW	1	22	20										
62642	PER	IRR	Jorgensen, Jerry R. & Laury R.	NW	NW	1	22	20										
62642	PER	IRR	Jorgensen, Jerry R. & Laury R.	SW	NW	1	22	20										
62642	PER	IRR	Jorgensen, Jerry R. & Laury R.	SE	NW	1	22	20										
62827	PER	I&D	Dalton, Janet L.	SE	SW	36	23	20	2.00									
63309	PER	IRR	Davis, Donna M. & Titus, Annette Y.	NW	SE	3	22	20	1.00									
63782	PER	IRR	Jones, Gregory W. & Laura	SW	SW	2	22	20										
63782	PER	IRR	Jones, Gregory W. & Laura	SE	SW	2	22	20										
63782	PER	IRR																
DOMESTIC WELLS							67									75.04 Duty = 1.12 AF per well (1000 GPD)		
				COLUMN TOTALS			1210.77			183.70			450.23					
				DUTY TOTALS			1027			450								

## **HYDROGRAPHS OF SELECTED WELLS**

(1983 TO PRESENT)

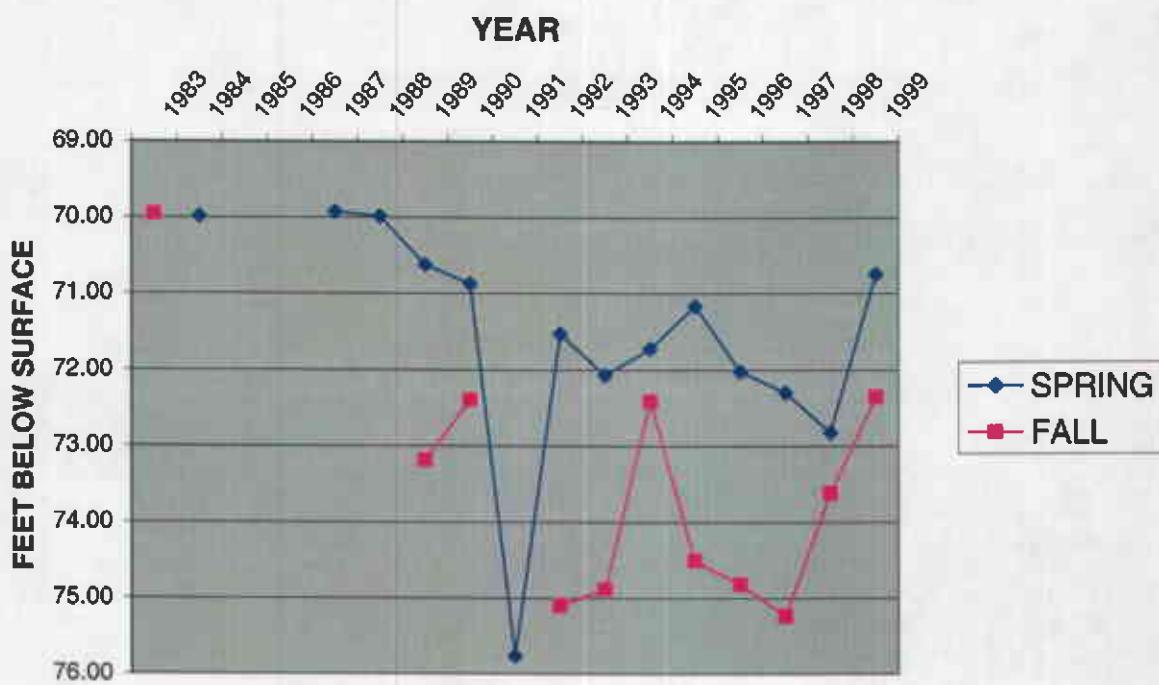
### WELL 212008ccad



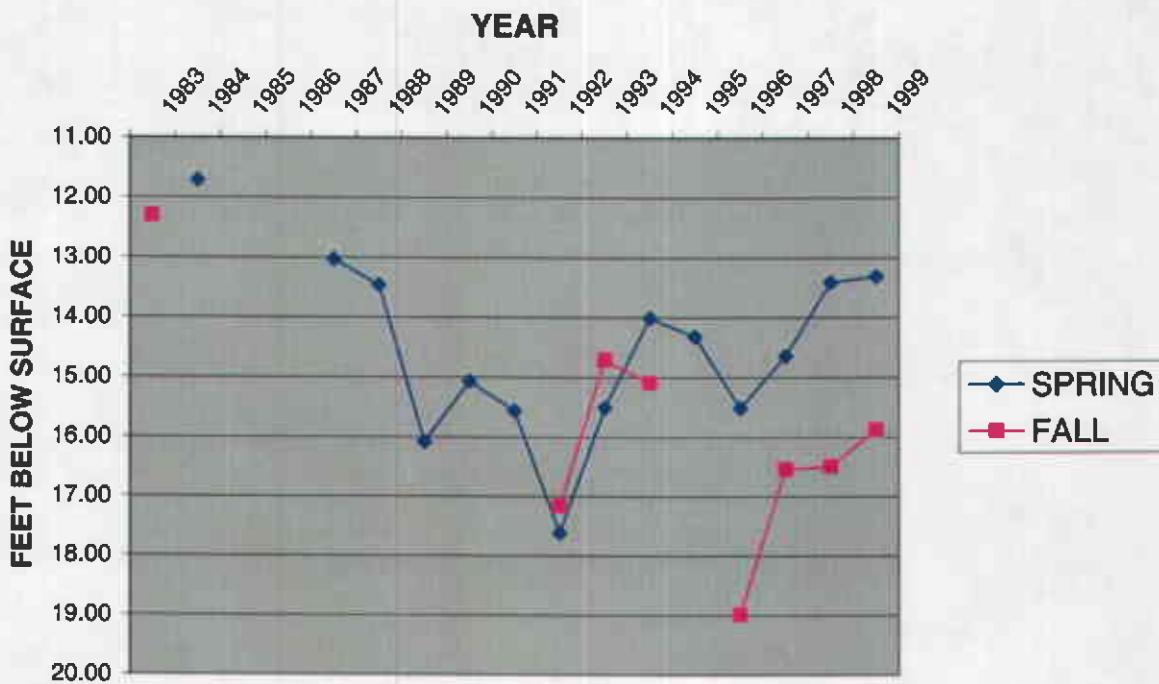
### WELL 212004ccc



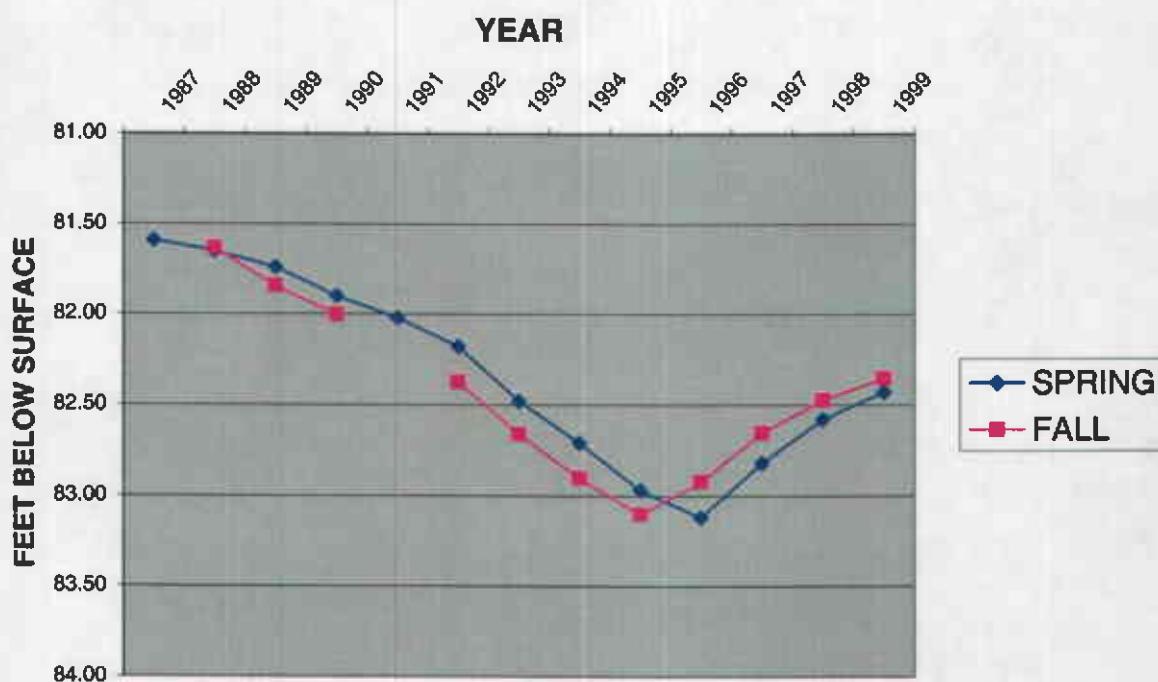
### WELL 222002cd



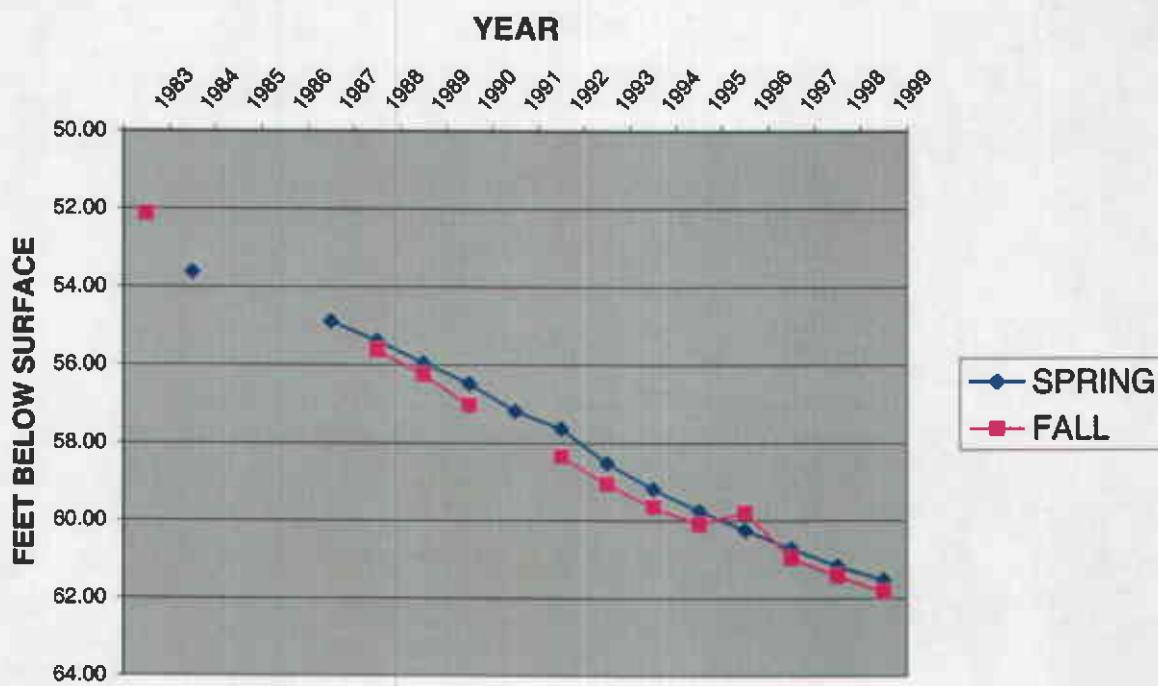
### WELL 232022abb



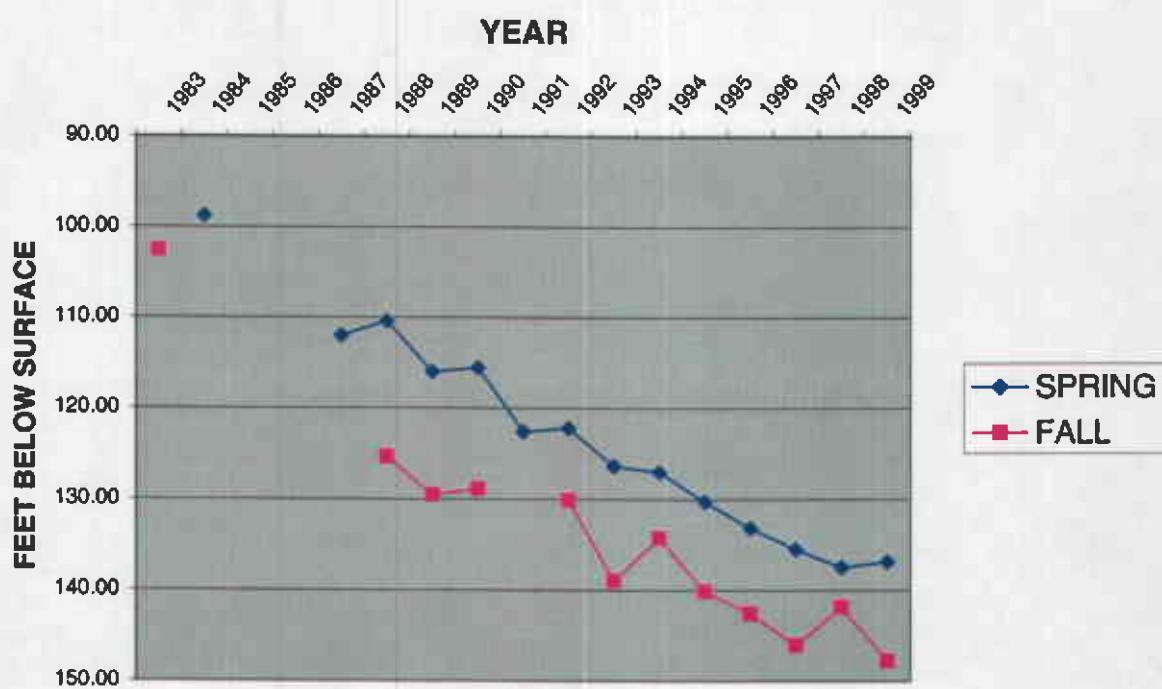
### WELL 232013abca



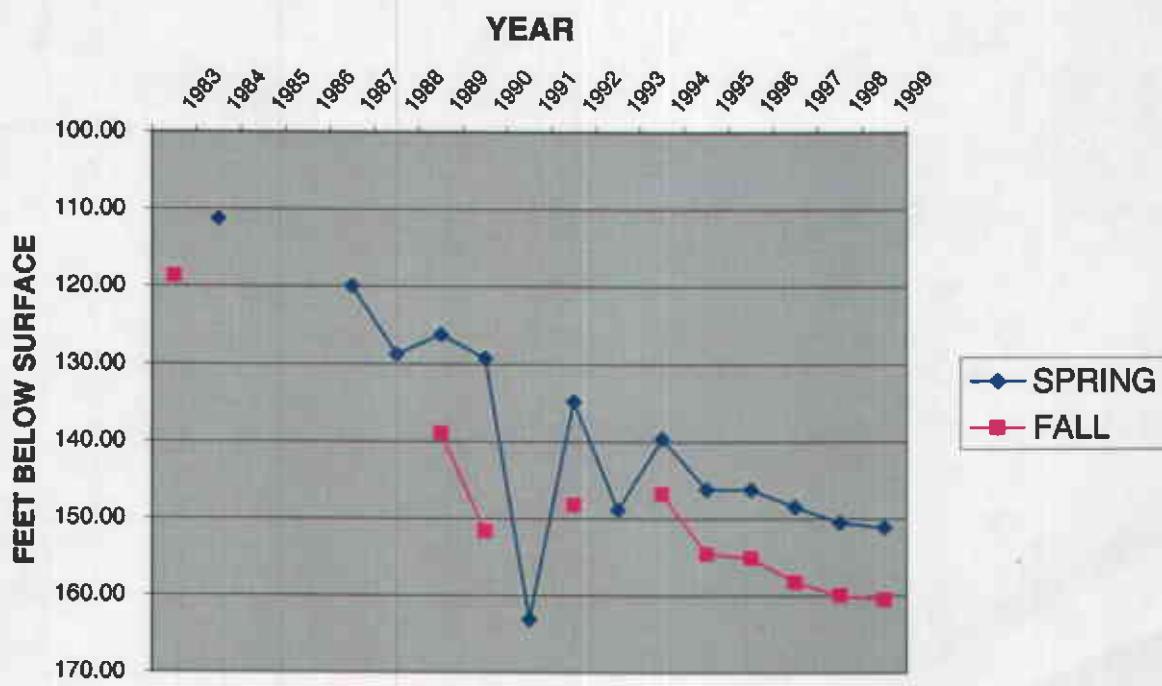
### WELL 232035abab



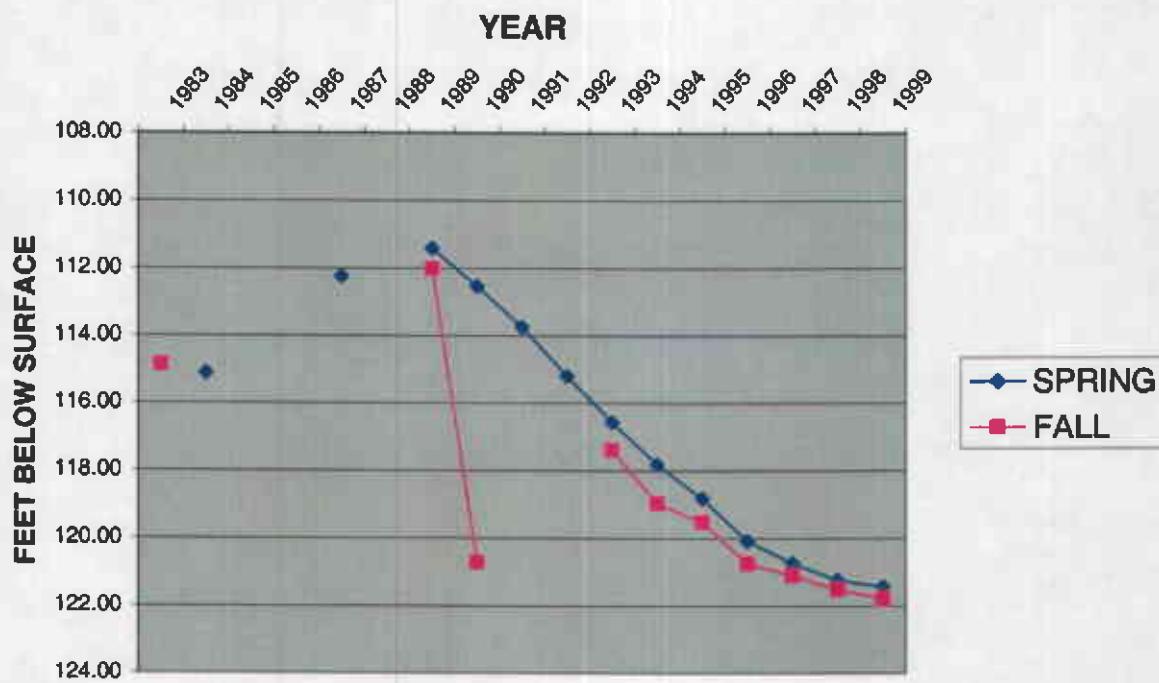
## WELL 222105ab



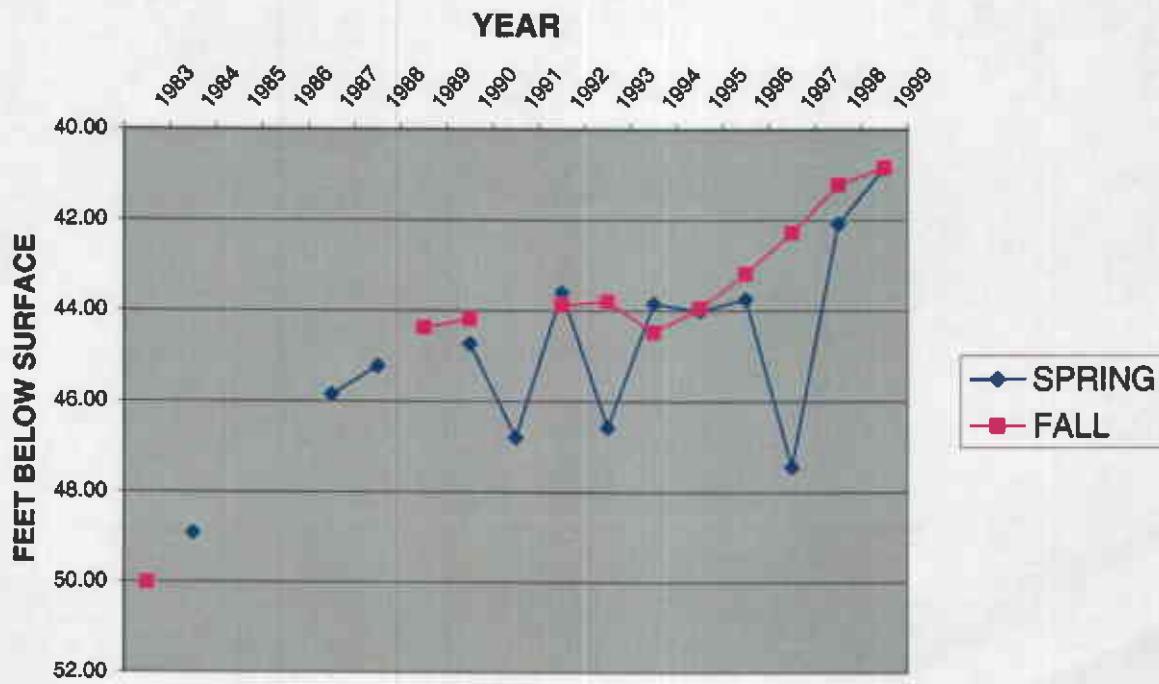
## WELL 222104dac



### WELL 222110cdd

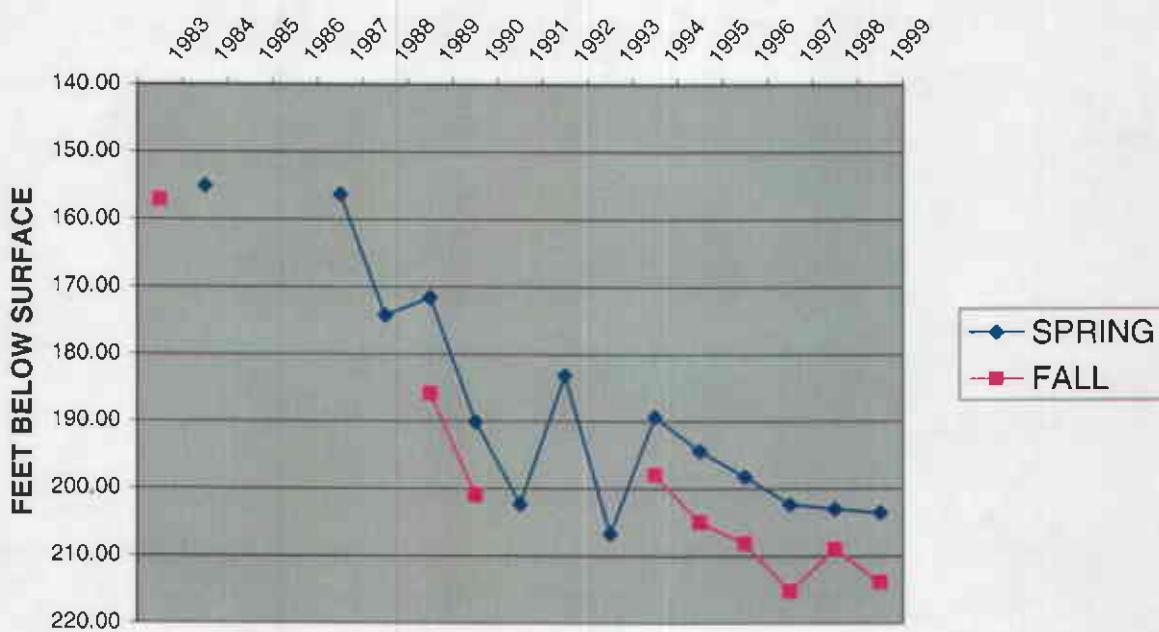


### WELL 222123cda



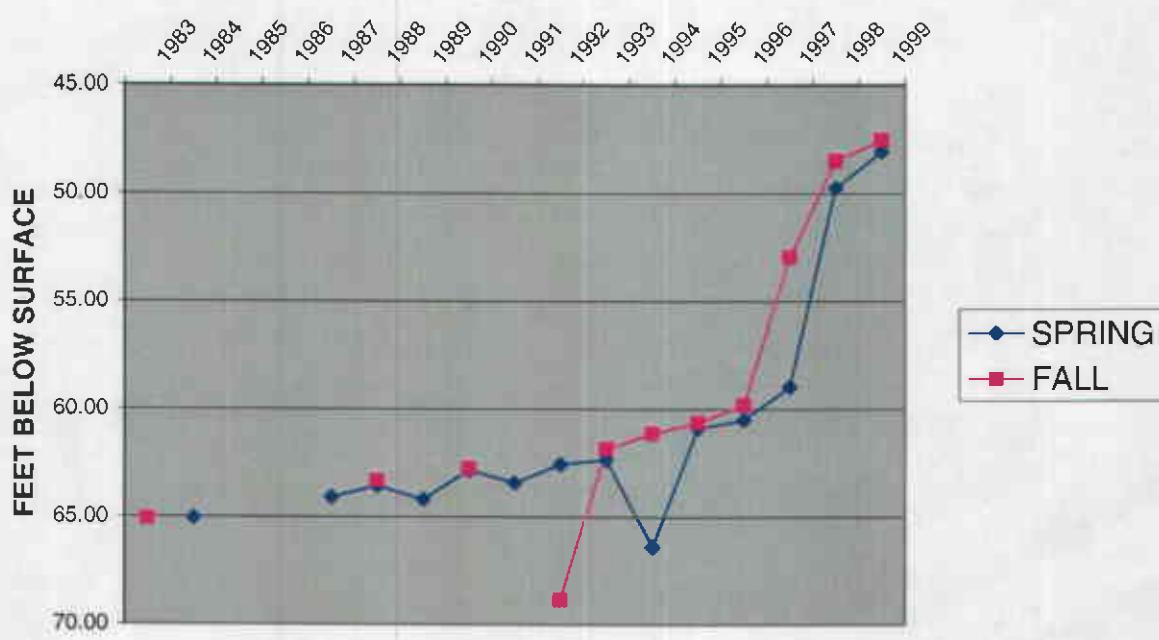
## WELL 222116bbd

YEAR



## WELL 222107bd

YEAR



## **SELECTED BIBLIOGRAPHY**

- 1) Rush, E.F., and Glancy, P.A., 1967, Water resources Appraisal of the Warm Springs - Lemmon Valley Area, Washoe County, Nevada: Nevada Department of Conservation and Natural Resources, Water Resources - Reconnaissance Series Report 43.
- 2) Ross, W.C., 1997, Hydrology and Simulated Effects of Development in Warm Springs Valley, Washoe County, Nevada: Washoe County Department of Water Resources.
- 3) Katzer, T., 1997, Hydrogeology of Warm Springs Valley and Feasibility of Aquifer Recharge, Storage, and Recovery with Emphases (sic.) on the Marshall and Winnemucca Ranch Areas, Washoe County, Nevada: Prepared for Robert W. Marshall.